

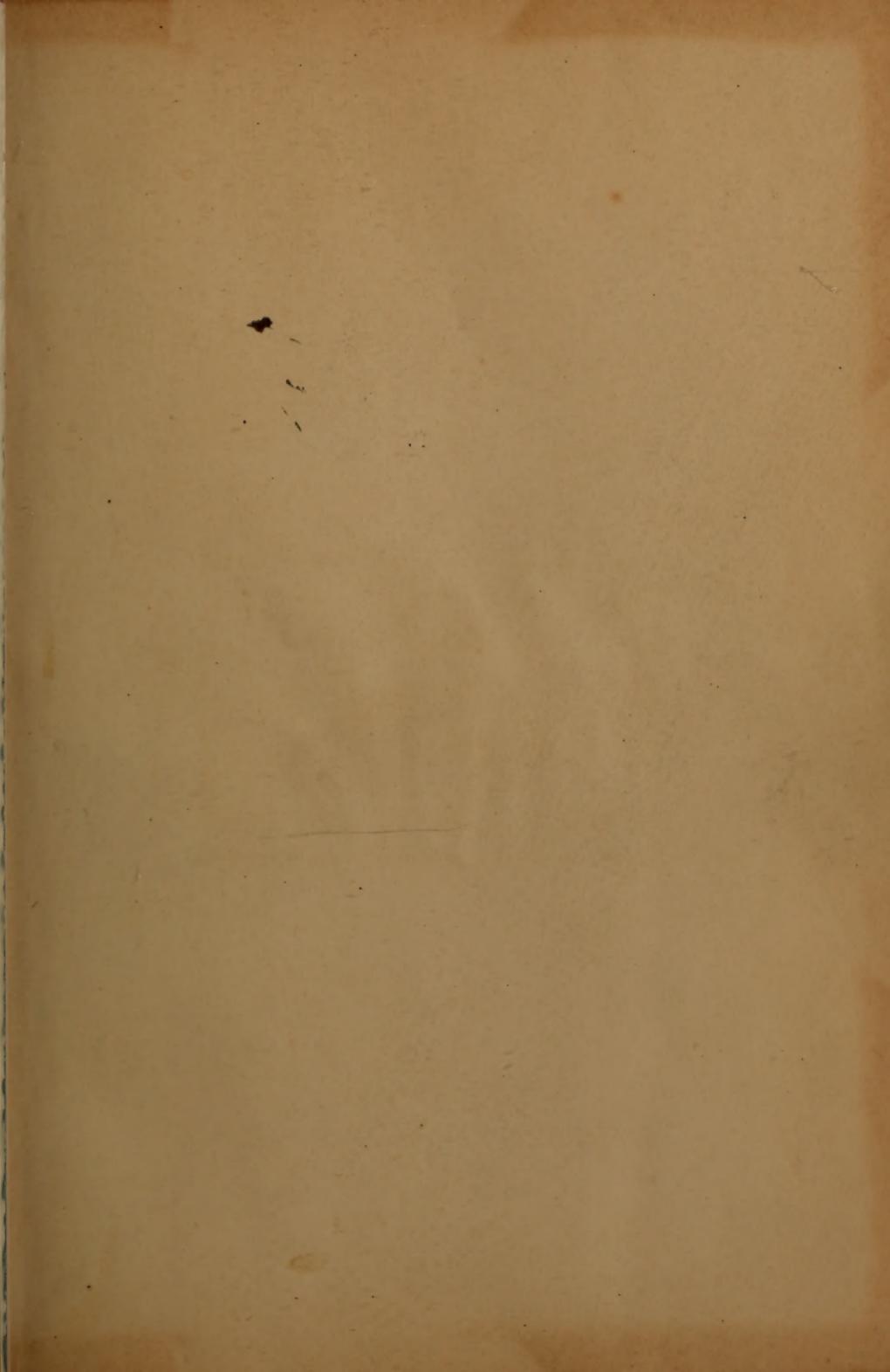
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THE HORSEMAN'S ILLUSTRATED GUIDE

FIFTY

ILLUSTRATIONS



HABITS & DISEASES OF THE HORSE

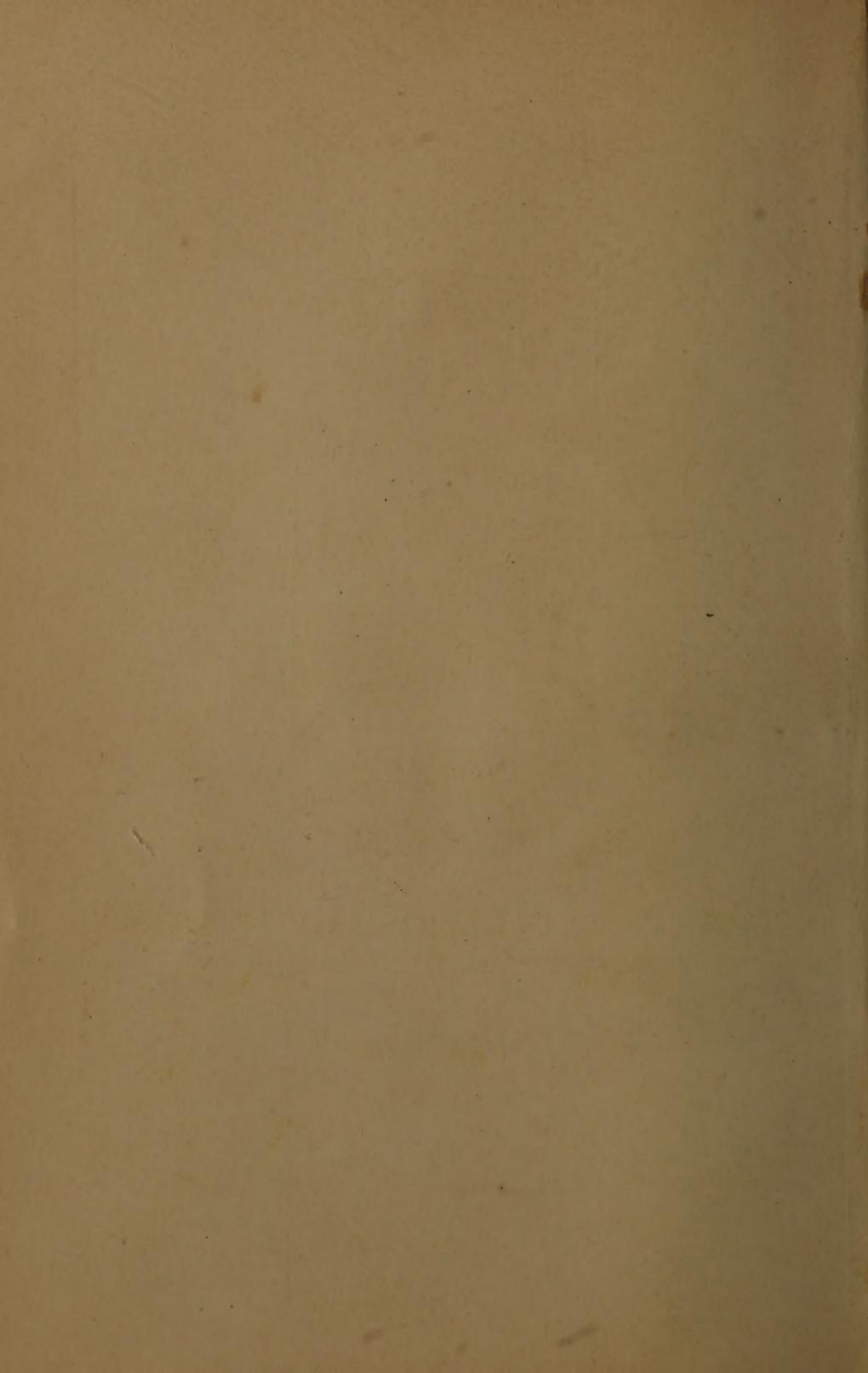
AND OTHER ANIMALS

BY J. C. SCOTT.

1880

BUFFALO. MAERZ LITHOGRAPHING.CO.

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THE

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ON THE

HABITS AND DISEASES OF THE HORSE

AND OTHER ANIMALS.

BY J. C. SCOTT.

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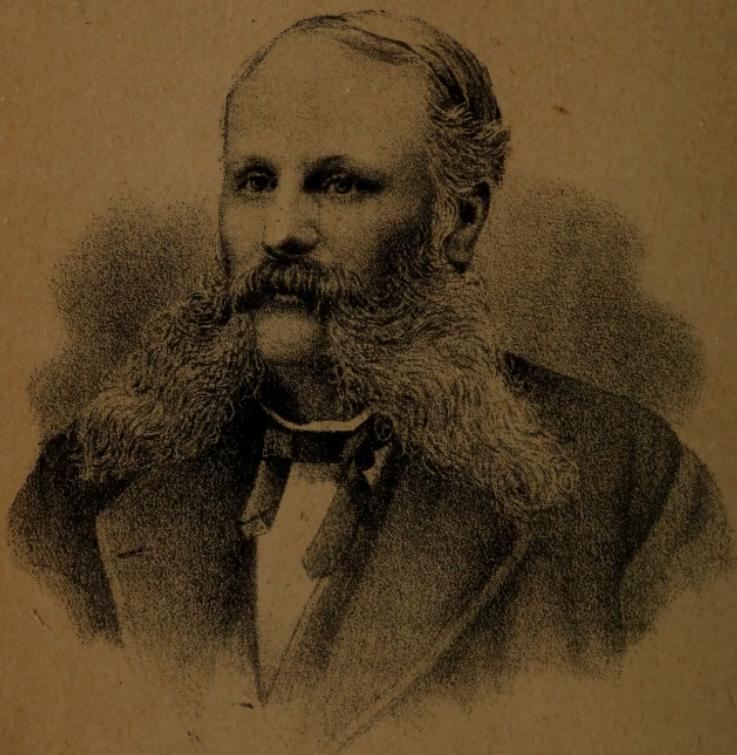


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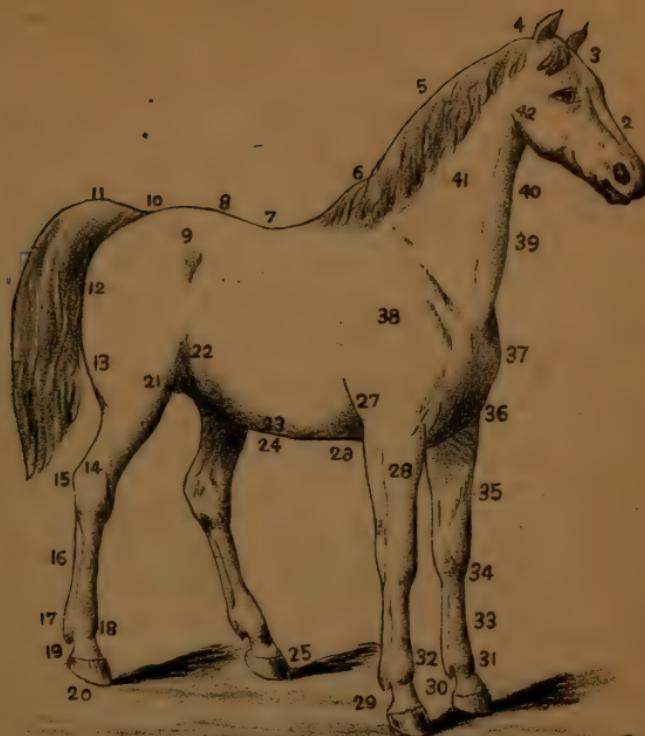


J. C. Scott

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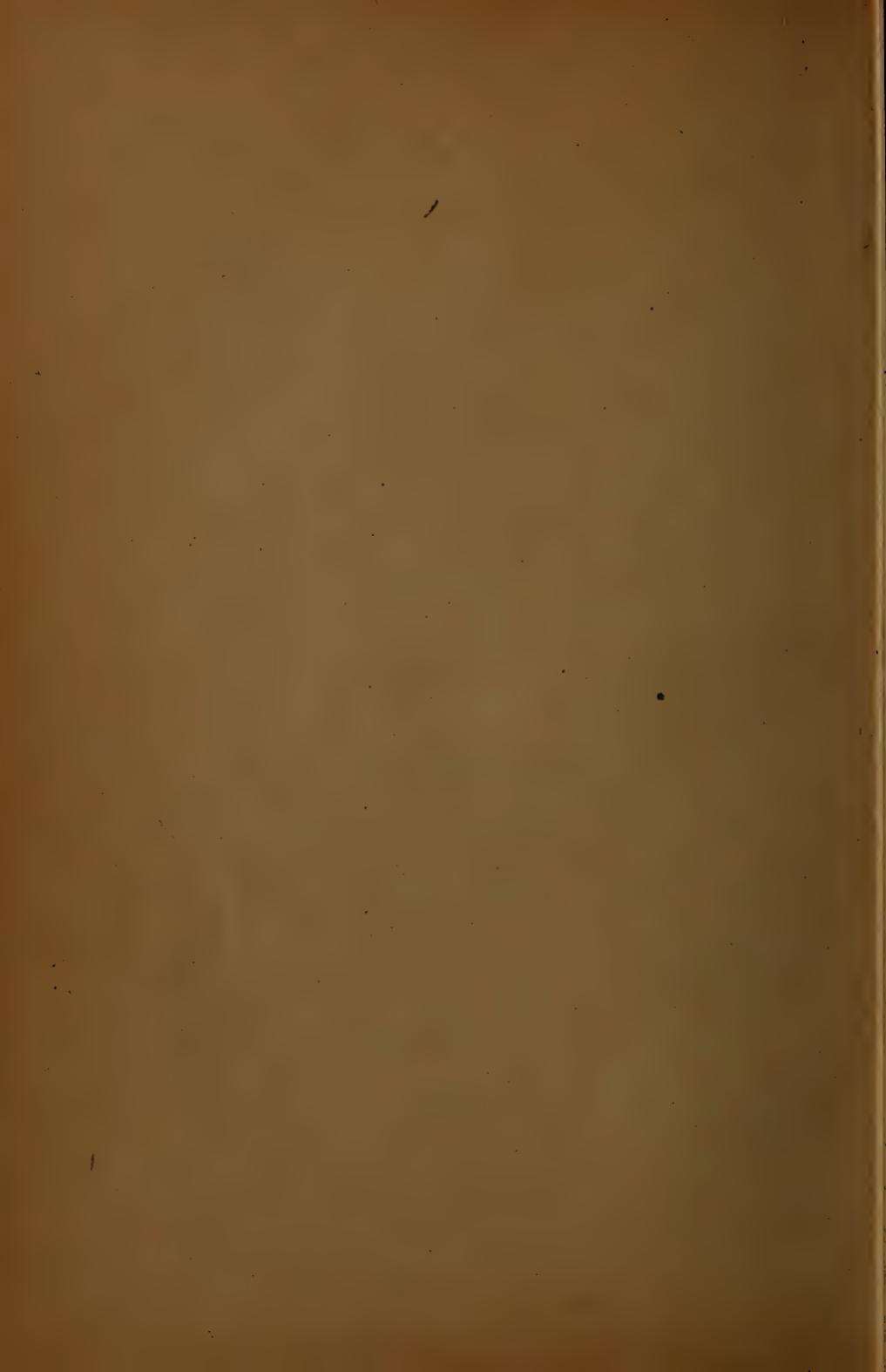
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No. 1.

NAMES AND SITUATIONS OF THE EXTERNAL PARTS OF THE HORSE.

1. Muscles.	15. Hock.	29. Heel.
2. Face.	16. Cannon.	30. Small Pastern.
3. Forehead.	17. Fetlock.	31. Large Pastern.
4. Poll.	18. Large Pastern.	32. Fetlock.
5. Crest.	19. Small Pastern.	33. Cannon or Shank.
6. Withers.	20. Hoof.	34. Knee.
7. Back.	21. Sheath.	35. Forearm.
8. Loins.	22. Flank.	36. Breast.
9. Hip.	23. Belly.	37. Point.
10. Croup.	24. Stifle.	38. Shoulder.
11. Dock.	25. Coronet.	39. Windpipe.
12. Quarters.	26. Girth.	40. Gullet.
13. Thigh.	27. Elbow.	41. Neck.
14. Hamstring.	28. Arm.	42. Jowl.



INTRODUCTION.

Our object in publishing this work is to give the general management of the horse in all things relating to the training and driving to which the horse is made liable;—we say made liable, because two-thirds of all bad habits are brought on by our own mismanagement. There never was a naturally ill-disposed horse foaled. All bad horses are made so by bad treatment; baulky drivers make baulky horses. We have always succeeded in making all horses in our hands kind and gentle for all uses.

We feel assured in saying that all persons who come in possession of this work, and live up to its directions, will be equally successful. There is in this book all that is needed for the breaking of any kind of a horse, and we have used no process not explained here.

The principle on which we rest is kindness. We wish first to give the horse to understand that we are his friend, and to gain his affections. This method does not affect the spirit of the horse, but makes him your obedient slave at once. It causes him to like you, and gives him confidence when with you, because he feels that you are his friend, and by caressing him and always treating him kindly the bond of affection is made strong.

A horse broken on our system will be kind and gentle to every one who is so to him. The only way to spoil a horse is to abuse and ill treat him. The blood horse is as sensi-

tive as a well-bred gentleman. He don't wish to be cursed and bawled at. Always speak in a low, kind tone,—it has a soothing effect. Ladies are the most successful in breaking on this principle; for after gaining the confidence of the horse they are more kind, and increase the affection more than men. It is thus by love, not fear, that we gain this practical control over the horse.

In conclusion, I would say our system enables a boy fifteen or sixteen years of age to handle and break to harness the wildest animal.

Strength and courage are not essential, but patience, perseverance and kindness are required. The man who is void of patience cannot control and win the confidence of his horse or friend.

THE HORSEMAN'S ILLUSTRATED GUIDE.

General Principles of Managing Horses.

The great strength and susceptibility of the horse makes his control and successful management very greatly dependent upon the skill and prudence brought to bear in his education. This requires a knowledge of his peculiarities of nature, and of the effects produced upon him by different causes and modes of treatment, with the art of adapting means to the end of mastering and controlling his resistance into such limits of character as we desire.

To properly understand the horse we must view him in his relations to man, mentally. He has an understanding, not it is true like that of man, still he is animated by a spiritual principle by which he is made to feel and see, though with less clearness. It is, however, analogous to that of man. Man has an understanding, which the horse has not, and he has a rational and moral nature, but the horse has no sense of understanding which man does not possess. With less strength, physically, but higher order of understanding, it must be seen that our supremacy is not meant to be one of physical power only, as of brute over brute, but the domination of mind. Hence we are thrown back upon and made dependent for our mastery upon the skill and resources of our ability to see and understand the causes of resistance and counteract them by prudence and indirect measures.

Now it is seen that the principles of educating and governing the horse are essentially the same as those necessary in the education and government of man, with the difference of being necessary to adapt the efforts more directly to the limited understanding and control of the greater physical resistance of the horse. A horse understands only from experience, and consequently his sensibilities and impres-

sions are more acute when once aroused to an impression of danger, and his resistance more positive and determined upon learning his ability to resist control. Therefore, three considerations must govern the success of the effort.

First.—The prudence and skill brought to bear in addressing and convincing the intelligence of the animal, and of guarding against the excitements and instincts of resistance induced by fear.

Second.—The ability to restrain resistance and enforce submission.

Third.—The character of the resistance and the will and endurance of the animal to resist control.

The first consideration implies winning the confidence and promoting and encouraging obedience by patient, gentle treatment.

It is this tact of the adroit encouragement of flattery that creates and maintains the sympathies of the animal to submit willingly and patiently to the restraints and severities of control, the heart rebounds and stills the energies to the most willing obedience when rewarded and flattered with kindness, when a sense of power is recognized and felt to be absolute. Now as far as a sense of inherent power and the ability to inflict pain, the horse recognizes man in the position of a master, and to the degree that his power is softened by gentleness and affection—there is a co-operative desire to obey and submit to his control. To be successful in the exercise of this advantage there must be patience, gentleness and honesty of effort and purpose. To the degree that where there is want of this there is not only failure to restrain and overcome the excitement of fear, but there is want of gentleness and obedience characterizing the nature of the horse.

To enforce the obedience and successful control of the horse implies a knowledge of such principles and methods of management as will give us power to do it. But as resistance may be general or local, or both, and varied in character and degree from the most vicious and determined resistance to that of some simple habit, the efforts must not only be adapted to the degree and character of the resistance, but the control must be of the most positive and convincing character.

Man's Superiority.

Man is superior to the horse, because of his intelligence, by which he can devise and adopt measures to overcome the strength of the

horse or employ it against itself. The knowledge of training and managing horses lies in this mental superiority. Man becomes superior to the ignorant horse only so far as he can manage and impress him with a sense of undoubted superiority. Recognizing the need of conforming to the laws of his nature so as not to excite his resistance, do not let him comprehend it possible to resist control. Seek in the second place to disconcert and control him under all circumstances as to impress him most forcibly with man's power and absolute supremacy.

The Necessity of Proper Management of Horses.

Prudence in conforming to the laws of the horse's nature and winning his confidence by kindness, though indispensable, is only as the caution which guards against the force of a momentum. There is no ability to control, and there would be no need of subduing the horse by force, had there been no law of his nature violated. Since effects must be the result of causes, every consequence requiring the genius of man to combat and control must be the result of his own imprudence or ignorance. Harshness, and the neglect of this necessary attention, while mainly the cause of mischief, lead us to infer that the absence of such causes, with corresponding regards for methods of kindness, is sufficient to win the bad horse to a forgetfulness of his power of resistance. The course of reasoning that teaches him man's inability to enforce absolute and unconditional submission under all circumstances of resistance; in fact, to disconcert and beat him on his ground with the apparent ease and certainty of positive ability, without resorting to harsh means or inflicting pain. For, as the aim of the physician is to subdue the force and effect of the disease by using remedies the least aggravating in their action on the system, so the aim of the horseman should be in enforcing the submission of the horse to do it as nearly as possible on a moral basis.

Principles of Thorough Training of Bad Horses.

The horse's confidence and rebellion being usually the result of long standing in successful resistance, his subjugation must be made convincing by repeated proofs of being overmatched, and that resistance is useless; for, since his willfulness and rebellion is based upon

the limited reasoning of his experience, that unconditional submission is the only alternative, and this you cannot prove to the understanding of the horse without repeating your lessons until he submits unconditionally.

Man has the right of control, restraint, correction, and even destruction of life; but we must bear the consequences of those violations of the laws of his nature to which he is thereby subjected. Show your horse exactly what you want him to do, and endeavor to use the patience and reason in teaching and controlling him you would at least believe necessary for yourself to understand, if placed in like circumstances.

Ignorant of the language and intentions of a teacher, however preserved his patience, and refrained from abuse, what progress would you make as a pupil, gifted as you are with all your intelligence?

If possible, elevate your feelings by relieving your responsibility to yourself, to community, and to the noble animal committed to your charge. Make your horse a friend by kindness and good treatment.

Be a kind master and not a tyrant, and make your horse a willing servant and a slave!

Educating Horses to Objects of Fear.

As we learn from experience, there are no effects without causes; and, as the horse becomes fearless and confident, so far as he understands, there is no cause for fear. We should remove the cause of mischief as much as possible, by complying with those laws of his nature by which he examines an object or determines upon its innocence or harm; and this is the more necessary in his early training, since first impressions are strong in the horse, and once learning of danger when once excited. Whatever the horse understands to be harmless he does not fear; consequently, great attention should be given to making him examine and smell of such as would be likely to frighten him in any place. A horse will never become satisfied in regard to an object that startles or frightens him by looking at it; but if you will let him approach it slowly and examine it with his nose, he will very soon become satisfied it is not going to injure him, and he will care no more about it, and will never after frighten at it, however frightful it may seem to be in appearance.

The Wild Colt.

As the training of the horse must be based upon the observance of those principles of his nature requiring the exercise of his reason in everything forced upon his attention, and of conveying to his understanding most clearly what is required of him, it is advisable to commence our lesson on the management of the horse by explaining how to proceed with the Wild Colt. The first step to be taken is to see that the enclosure in which you intend to operate upon the colt is unoccupied by anything which will distract the attention of the colt; for instance, fowls, domestic animals, etc., and all persons except the one who is to undertake the training. This latter precaution should be taken for the reason that the presence of other parties would annoy the colt. Also, that, by allowing them to be present, you would violate the conditions of your instructions.

Being prepared, the object is then to get the colt into his training place as carefully as possible, using such gentle means as may be convenient and most likely to be successful without exciting the colt.

Every farmer or person at all acquainted with the management of horses knows well enough how to do this in his own way, without being governed by any fixed rule. The next thing to be done is to

Halter - Break the Colt.

As soon as he appears quiet and reconciled to the restraint of the enclosure, go cautiously and slowly towards him, making no demonstrations at all, but talking gently, or singing, as you please. It does not understand your language, and your presence may attract his attention. If he begins to walk away from you, stop, but continue your talking or singing, and appear as careless as you can about his presence until he becomes quiet again. Then start again, and leisurely approach him as before, and so repeat, as circumstances require, until you are close enough to touch his withers, or permit him to smell of your hand, should he seem so disposed. Remember, you must be patient and gentle in all your actions. Now touch him on the withers gently, and gradually win his confidence, so that you can handle and rub him on the neck or head. Do not try to hold him or impose the least restraint; that would cause him to become excited and afraid of you.

Handle the colt in this way until he becomes reconciled to your presence, and will suffer you to scratch him as you please.

Now step back and take your halter quietly. The halter should be of leather. Rope halters are irritable to young horses; they are so harsh that they hurt the head whenever the colt pulls. Being hurt, the colt will naturally try to get his head out of the halter, and the more it will hurt, because the tighter and harder it will pinch, which will frighten him the more, and he will try to free himself at all hazards, until he pulls himself down or breaks the halter. In that case his experience would have been a bad one, for you would have learned him to be a halter-puller. You hold the halter in the left hand, having unbuckled it, and approach the colt slowly; don't be in a hurry; give him time to smell and examine every part in his own way. While he is examining the halter, caress and rub him; it will further your efforts greatly to give the colt something he likes, such as apples, oats, corn, salt, etc., that you can get hold of handily. Then take hold of the long strap which goes over the head with the right hand and carry it under his neck, while you reach the left hand over the neck and grasp the end of this long strap; then lower the halter just enough to get his nose into the nose-piece; then raise it up to its proper place, and buckle.

This is the best method to halter a colt, and, in cases of wild ones, perseverance and patience is required, always being careful not to become excited or angry, for, in that case, the colt will show a great deal more resistance, which, in the end, and at a great loss of time, you will have to overcome.

Hitching Colt in Stall.

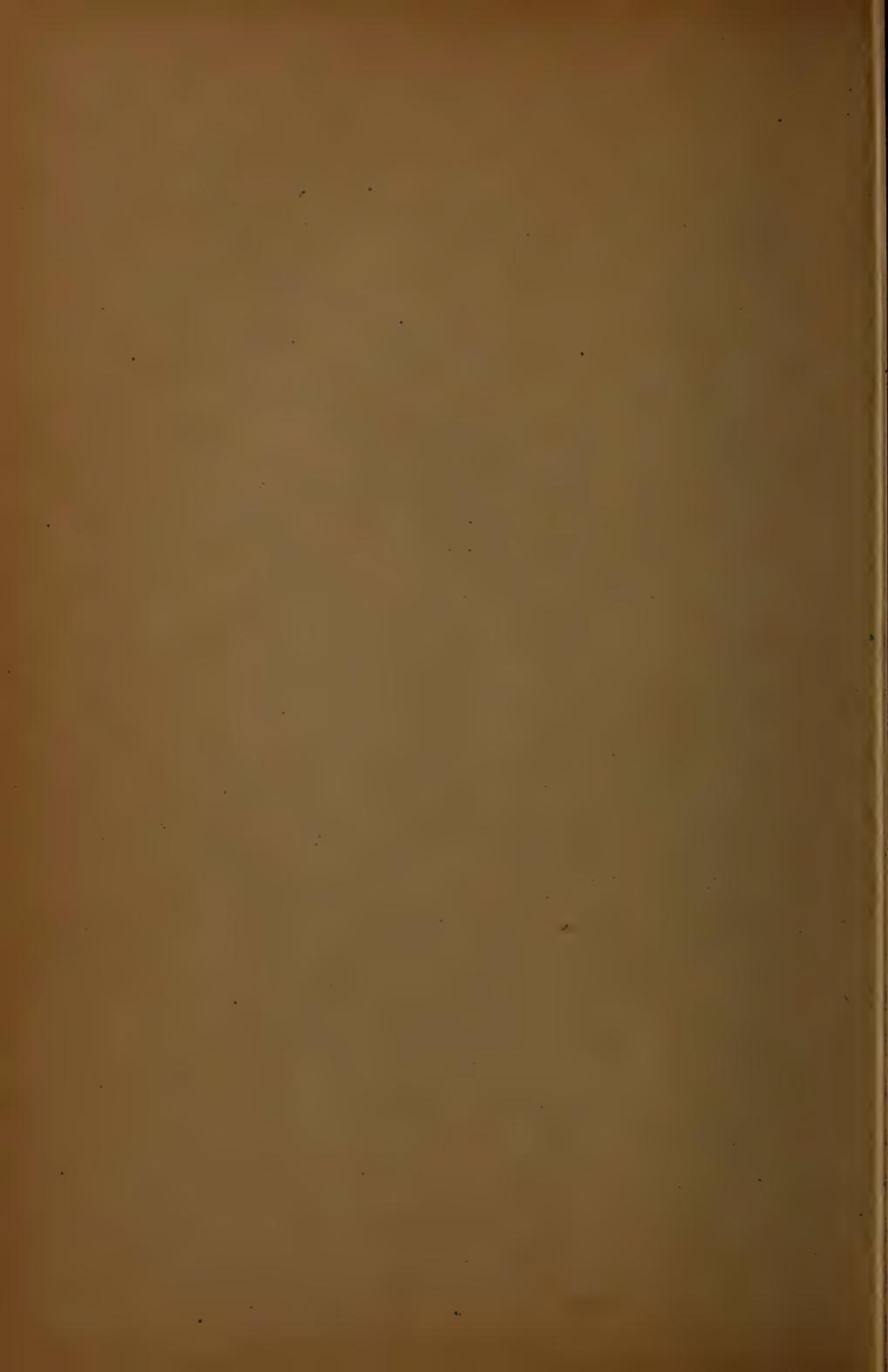
(See Engraving No. 2.)

Two principles are involved in controlling and teaching the horse to submit to the restraint of the halter while hitched. Prepare your stall, which should be about four or five feet wide, by attaching a rope so as to bring it across and fasten firmly, so as to strike the hind parts; or you can bore holes through so as to put a pole in the same manner as a rope. Now tie the halter long enough, so that, as the colt attempts to go back, he will strike the rope or pole across behind him before he can feel the restraint of the halter. You should in this, as in everything else you attempt, teach your colt to be gentle. In every case you should untie the halter before taking down the rope.

No. 2.

HITCHING COLT IN STALL.





or pole. Another method: take a half-inch rope, place under the tail, cross on the back, bring forward and tie under the neck or the breast; then pass the halter-strap through the ring of the manger and tie to the rope, so when the horse pulls he will be punished, and the impression will be made stronger than the above.

To Halter-Break a Wild Colt.

(See Engraving No. 3.)

First provide yourself with a little pole about ten or twelve feet long; cut a notch into one end with your pocket-knife, and about seven inches from this end drive a nail in, the head bent a little towards the end having no notch. Next, you want a good half-inch manilla rope, about thirty feet, with a slip noose in one end, and a knot in the rope about twenty inches from the end with the noose, so that it will not draw so tight as to choke the colt down, but will allow the noose to draw tight enough to shut off his wind, so as to prevent him from making a very obstinate resistance. Now get a short breast-strap, or a long hame-strap will do. This put into your pocket, convenient to the right hand, for future use. Now approach the colt slowly and carefully, as before described, remembering that all persons must be excluded. When you succeed in approaching to within four or six feet of the shoulders, retreat slowly, as before, and take your stick all ready prepared, holding the notched end from you and swinging it very gently a little to the right and left in a horizontal position. This is a new object of fear to the colt, and will be regarded with a great deal of suspicion. However, a little patience will soon enable you to get so near the colt that you can hold your stick gently over the back and shoulders. Then gradually lower it, moving gently as before, till you can place your hand on his neck. As this is borne let it drop a little lower until it rests upon the mane. Now commence scratching the neck with the stick gently, but firmly. This will please the colt and cause him to stand quiet. While scratching with your stick in this way, slide your right hand slowly and cautiously along its surface until you get to the mane, when you scratch with the hand in the place of the stick. All this is proving to the colt that you will not hurt him; in fact you please, and hence he submits quietly. Now step back quietly to where your rope is and take the noose and place it on the stick, letting it rest on the stick, and between the nails or shavings, with the main part of the



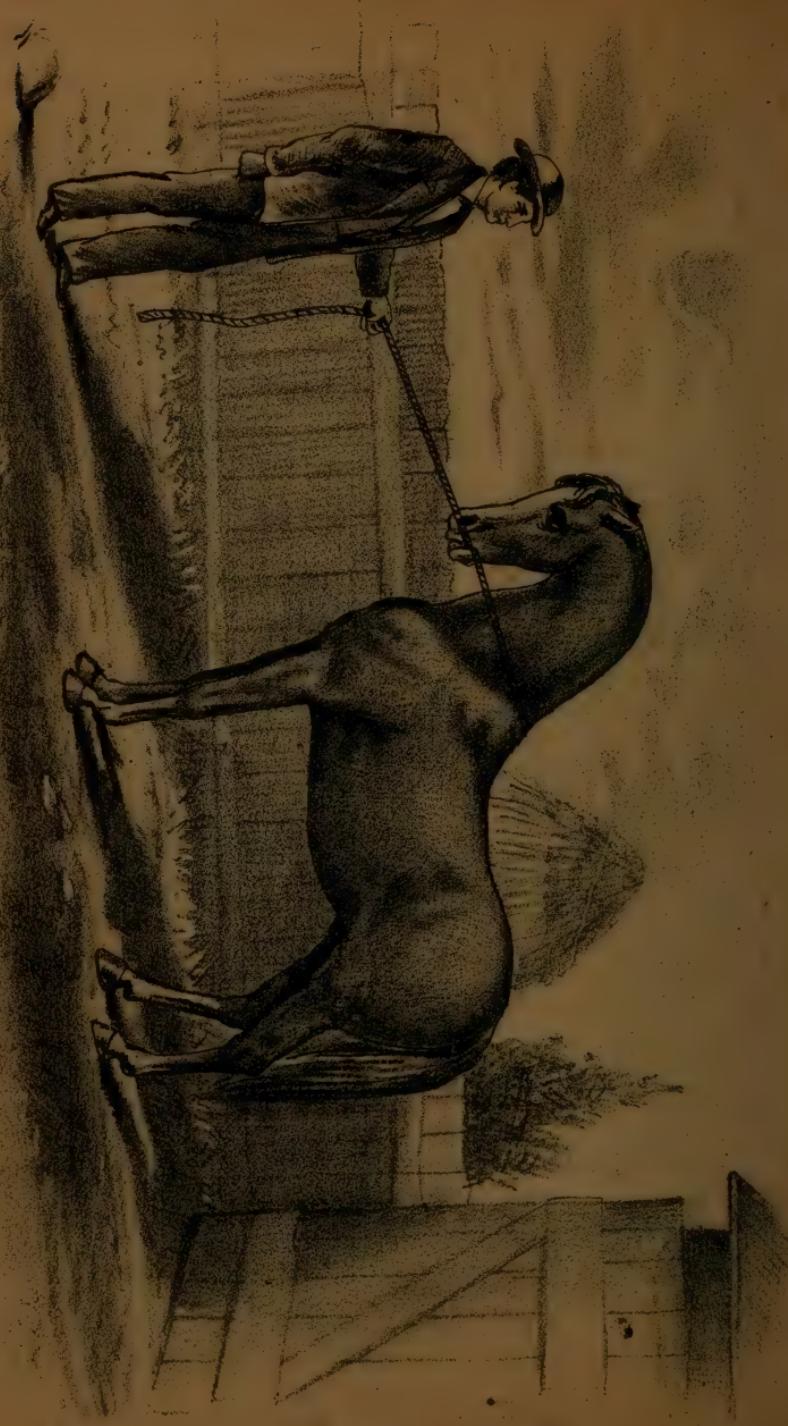
No. 3.

noose hanging below the stick, and large enough so as to be slipped over the head easily, while you keep the other end of the rope in the hand with the stick. Your halter or noose now hangs upon your stick, so spread that you can put it over the colt's head without touching a hair. Your halter arranged, holding it before you, swinging upon the stick, you approach the colt in the same cautious manner as before, until you bring it to the nose. This being a new object of fear to the colt, he will smell of it cautiously. While he is smelling it, you are gradually raising it over his head—so gently, he does not feel or care about it until you get it well back of the ears; then turn your stick and your noose will drop on his neck. If he does not start, take the slack in your rope gently; at the same time approach his shoulders cautiously, and rub him gently, if he will allow it.

If he should endeavor to run away, keep hold of the rope. If he tries very hard to get away he soon finds himself out of wind, caused by the pressure of the rope about the neck, consequently he will offer but little resistance, and will very soon allow you to come up to him just as you please. Now you should use him gently.

As soon as he will allow you to approach, loosen the noose from his neck, and by kind words and caresses let him know you do not wish to hurt him. Keep on caressing him till he will allow you to rub his neck and ears. Encourage him by feeding from your hand something that he likes. When he submits so far as to let you handle his head and neck, take the other end of the rope and tie around, make hard knot in the end and another knot about twenty-five inches from the end.

This knot should be left slack. Now take the end of the cord in the left hand and carry it under the neck to the opposite side, while you reach over with the right hand and take it and bring it over the top of the neck again. Now put the knot in the end of the cord through the other and secure by drawing it as tight as possible. Now make a loop by drawing it up as tight as possible. Now make a loop by drawing a double of the slack rope under the rope around the neck. Make the loop long enough to slip into the colt's mouth, which can be done easily by gently insisting on his confidence. A green colt is not bad about taking anything in his mouth if you use judgment and do not frighten him. Slip this loop well up above the bridle teeth, and place the lip well over the jaw, under the roof. Now draw up

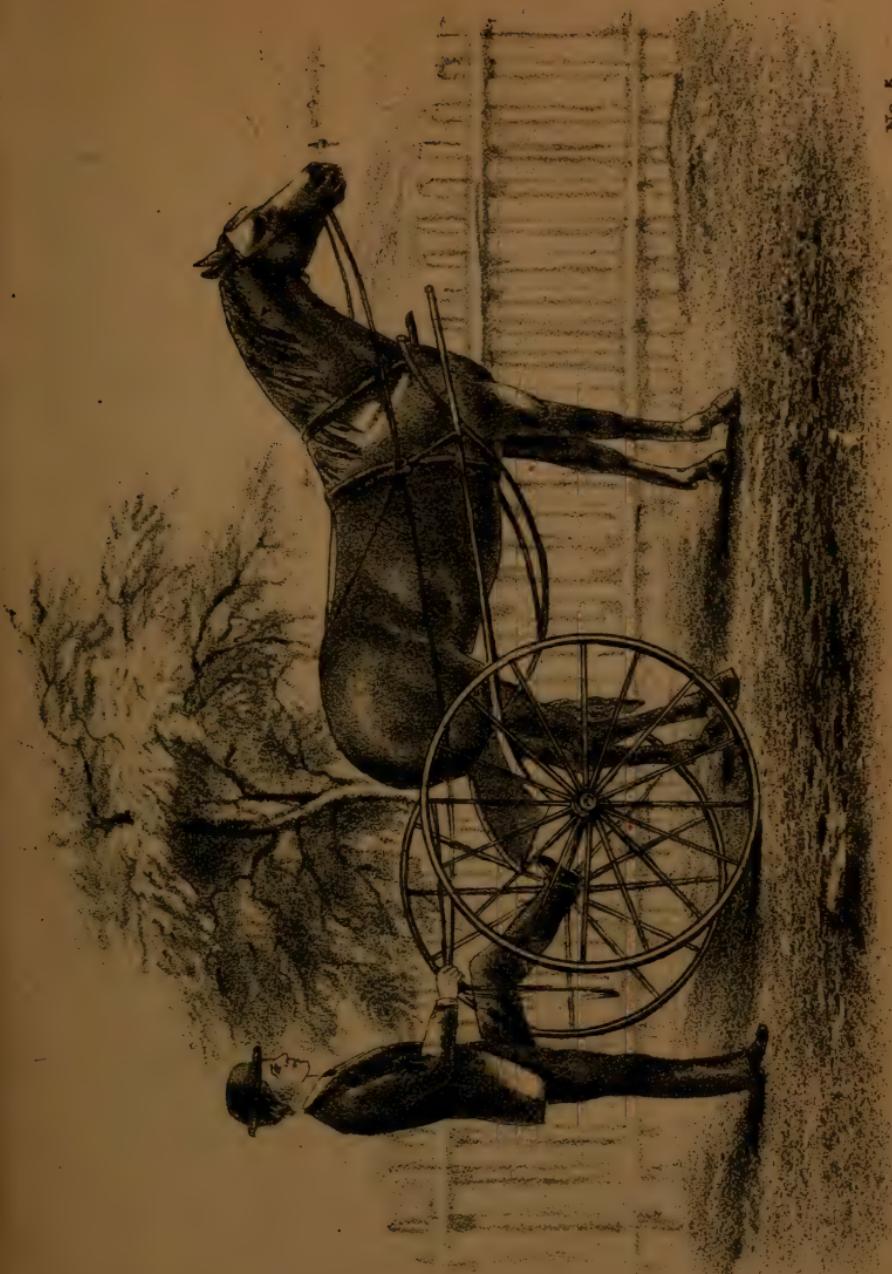


HOW TO BIT A COLT AND MAKE A BRIDLE.

No. 4.

No. 5.

BREAKING COLTS TO HARNESS.



your rope, by which you can inflict so severe a punishment that he will submit in a very short time, and allow you to handle his legs just as you please. Persevere until you can hold the foot in your hand, moving it gently and caressing the leg until he gets over the fear inspired by the use of the cord under the lip. If more thorough treatment is necessary, see "Proper Management of Horses Bad to Shoe."

How to Bit a Colt and Make a Bridle.

(See Engraving No. 4.)

Take your Camanche bridle, made exactly as before described, with the exception of the loop that goes around the neck; that should be made large enough to fit over the neck rather tightly where the collar is worn. Now bring your cord through the mouth from the off side, and bring back on the near, through the loop around the neck; now pull upon this cord and the head will be drawn back to the breast, tie with a bow knot and draw down close, so that should the colt show signs of rearing backwards, with one short jerk you can relieve him, while should he go over backward with the restraint on his neck he would be likely to injure himself.

You are now prepared to bit. Simply pull upon the cord a little, which will draw the head back slightly; after holding for a short time, render loose; then draw a little tighter, and repeat for four or five minutes, then stop biting, and repeat at some future time.

The great secret not only in biting but of training the young horse in any manner is in not confusing or exciting him to resistance by training too long. When your colt yields readily to the bit, you can check the head to suit. Making the check-rein rather tight causes the head to be carried high, while the delicacy given the mouth will prevent the nose being thrown forward. This method of biting may be regarded with little favor by those not understanding its effects, but all we have further to say on the subject is, give it a fair trial. Teach your colt to be perfectly submissive to your handling in every manner, to lead well, and to back freely at the word. You are now ready for the next step in his training, which is usually driving in harness.

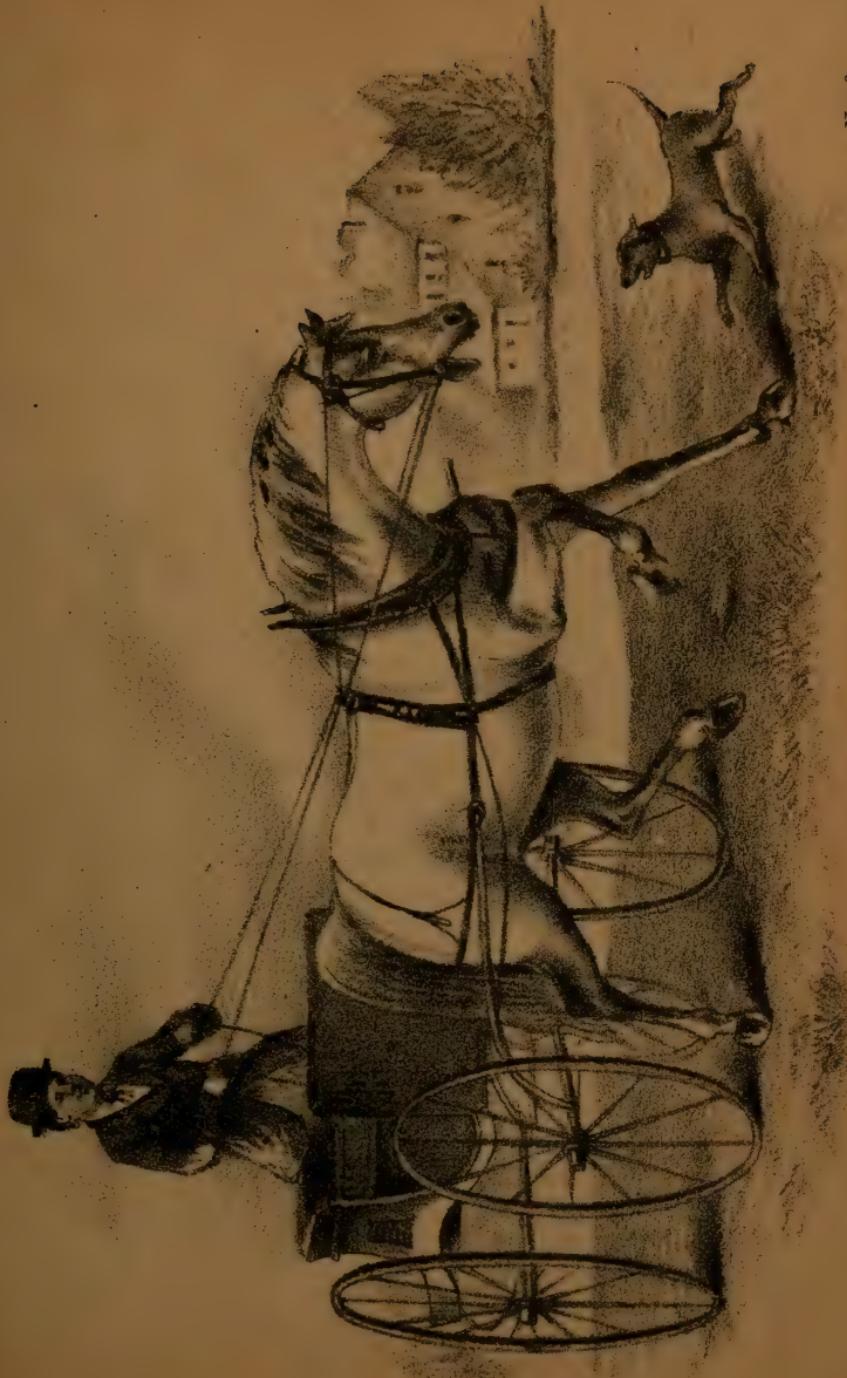
Breaking Colts to Harness.

(See Engraving No. 5.)

Put on your harness carefully, which should be made to fit well, and great care should be used in having it safe and strong in every

No. 6.

OBJECTS OF FEAR.



respect. Do not be tempted to drive your colt in an old, rotten harness, or to hitch to an old, rotten wagon, as such are liable to give way at any time. Many of the accidents causing horses to become subject to bad habits are the results of such imprudence. Let every step be made sure. Work safe, and you are sure to bring about a good result.

With your harness on, allow him to stand in his stall until he becomes somewhat used to the presence and pressure of the different parts, and will allow you to rattle them about without his caring for them. Now lead him around for a short time, and as soon as he appears quiet, check him up loosely and take down the reins and drive him around the yard. When he becomes familiar with the harness, check and reins, and will stop and start at the word, and drive around to the right or left, you can drive him about the street with safety, though in making this step put on the Camanche bridle for safety. You should then drive to sulky. We prefer a sulky at first. Let your colt see and examine every part of the sulky, until he cares nothing about it; then draw it up behind him, rattling and running it back and forth a few times, then attach the harness. Before starting him, back him up against the cross-bar of the shafts. If he should act frightened speak to him calmly, but firmly, at the same time holding your reins firmly so as to prevent him from swinging round, if he should try. Then go to him and rub and caress him until he gets over his excitement. Then run the sulky up against his haunches, at the same time soothing him by gentle words until you can shove the sulky against him just as you please and he not care anything about it. Now you can get into your seat and drive him around wherever you choose without danger. Let him go slow at first, until he becomes familiarized with the objects that are new to him along the road, as he is not as liable to become frightened while going slow as when driven fast.

Objects of Fear.

(See Engraving No. 6.)

In driving, be careful about using the whip too freely. If a stone or a stump, or anything of the kind should be regarded with fear, do not whip and drive the horse by. Let him stand a short time and look at the object until he seems careless about it, then drive closer, as he will bear, and so repeat, at the same time talking to him encourag-

ingly until you can drive him up to the object. Be very sure to have your colt comprehend fully that such objects are harmless—as opportunity offers in this way—and he will soon become so fearless and confident as to be regardless of such things; but if you whip him for becoming frightened at such things, he will associate the punishment with the object of his fright, and be more frightened the next time he sees it.

The horse being unable to reason only from his experience, you should convince him by careful examination that the object is harmless. For example: if the sight or smell of a robe a few feet distant should frighten him, put on your Camanche bridle and take him alone into your yard or barn, lead him gently to the robe, let him smell of it if he will, then take it in your hand, hold it gently to his nose, then rub it against his neck, side, and over his back, and so repeat for a short time. After being familiarized to it in this way, you can throw it over his back or tie it to his tail without causing him the least fear.

To familiarize a colt to any article that he may have regarded with fear, let him touch it with his nose, and rub him on the neck and side, and in a short time, when he finds it will not hurt him, he will become reconciled and care nothing about it.

To accustom your horse to the cars, lead him up to them, let him smell of them, and even put his nose on them, and in this way continue until he becomes familiar with them. And, then, do not fail to repeat your lessons until he cares nothing about the object. Should you fail by neglect it may render him worse than as though you had done nothing with him.

Driving a Colt in Harness.

When your horse drives well before a sulky then you may hitch him to a light wagon or by the side of a broke horse, and if you are breaking him for a farm or for hauling heavy loads, you can gradually increase his load until he will draw to the extent of his ability without comprehending that he has the power to do otherwise. After your horse is sufficiently broke to the harness, you can either allow him to carry his head as Nature may dictate, or by the proper use of the check-rein bring his head and neck into such position of style as his form and temper will bear, or your fancy dictate. In

teaching your young horse to drive well, do not be in a hurry to see how fast he can trot. Although your colt may be old enough to learn how to move well, and perhaps drive as gently as an older horse, he is not old enough to perform the work of an older horse fully matured. Require but little at first, gradually increasing as he develops in strength and hardens in his gaits. Care should be taken to keep each pace clear and distinct from each other. While walking, he should be made to walk, and not allowed to trot. While trotting, as in walking, care should be taken that he keeps steady at his pace and not allowed to slack into a walk. When occasionally pushed to his extreme speed in trot, he should be kept up to it only for a few minutes at a time, gradually requiring more as he becomes practiced and capable of endurance; and whenever he has done well he should be permitted to walk a short time, and encouraged by a kind word. Under no circumstances should what is termed "his bottom" be tried and overdone. The reins while driving should be kept snug, and when pushing him to the top of his speed, keep him well in hand that he may learn to bear well on the bit, as it is by means of the reins mainly that the horse, when going at a high rate of speed, is kept steady in his place. But while you should teach your horse to drive well to the pressure of the bit, be careful not to give him the habit of pulling too hard, for then he becomes not only unpleasant but difficult to manage. The art of drawing well cannot be taught by any written instructions. Practice and ingenuity in this respect can alone make a skillful horseman. Always strive to encourage and not overdrive your horse, and be careful to whip only for merited reproof. The too frequent use of the whip will cause the horse to plunge ahead every time he sees or hears any unusual movement of it, or at any mishap that may occur.

To Train a Horse to Stand when Getting into a Carriage.

Take your horse and lead him on the barn floor; place him in the position you wish him, and say "Whoa!" The object of this lesson being to teach him the word "whoa"—the most important word in horsemanship. You will proceed by stepping away from him, and, if he appears to trifle and not heed you, use the Camanche bridle, pulling upon him to warn him to attend to you. Practice this until he will allow you to walk away in any direction without moving him-

self. Take a whip and crack it slightly, and if he moves, put him back as before, increasing the cracks of the whip until you accustom him to stand while the whip is being flourished, and also to throw him and apply the method of controlling a nervous horse. If you are obliged to drive him while you are trying to break him, do not use the word "whoa," as he is not yet accustomed to minding it, and it will only make matters worse. Shift the position of the horse and repeat the lesson, putting on the harness and leading to places where he is accustomed to refuse to stand, and teach him to stand in those places, as well as teaching him to obey the word "whoa" before hitching him to carriage. Then hitch inside a building with the doors closed. Get in and out of the carriage, rattle the thills and shake the carriage, causing him to stand by means heretofore alluded to. If it appears that the habit is caused by fear of the carriage behind him, take him out of the thills and lead him around it, allowing him to examine it, and even eat oats out of a measure set in the carriage. Now take him out of doors, and if he renews his attempt to start, take him out of the thills and use the Camanche bridle, fetching him back between the thills, and say "Whoa." You will by this means soon teach him that "whoa" means for him to stop and stand. For the sake of not undoing all you have done, remember the caution heretofore given to say "whoa" only when you mean him to stop.

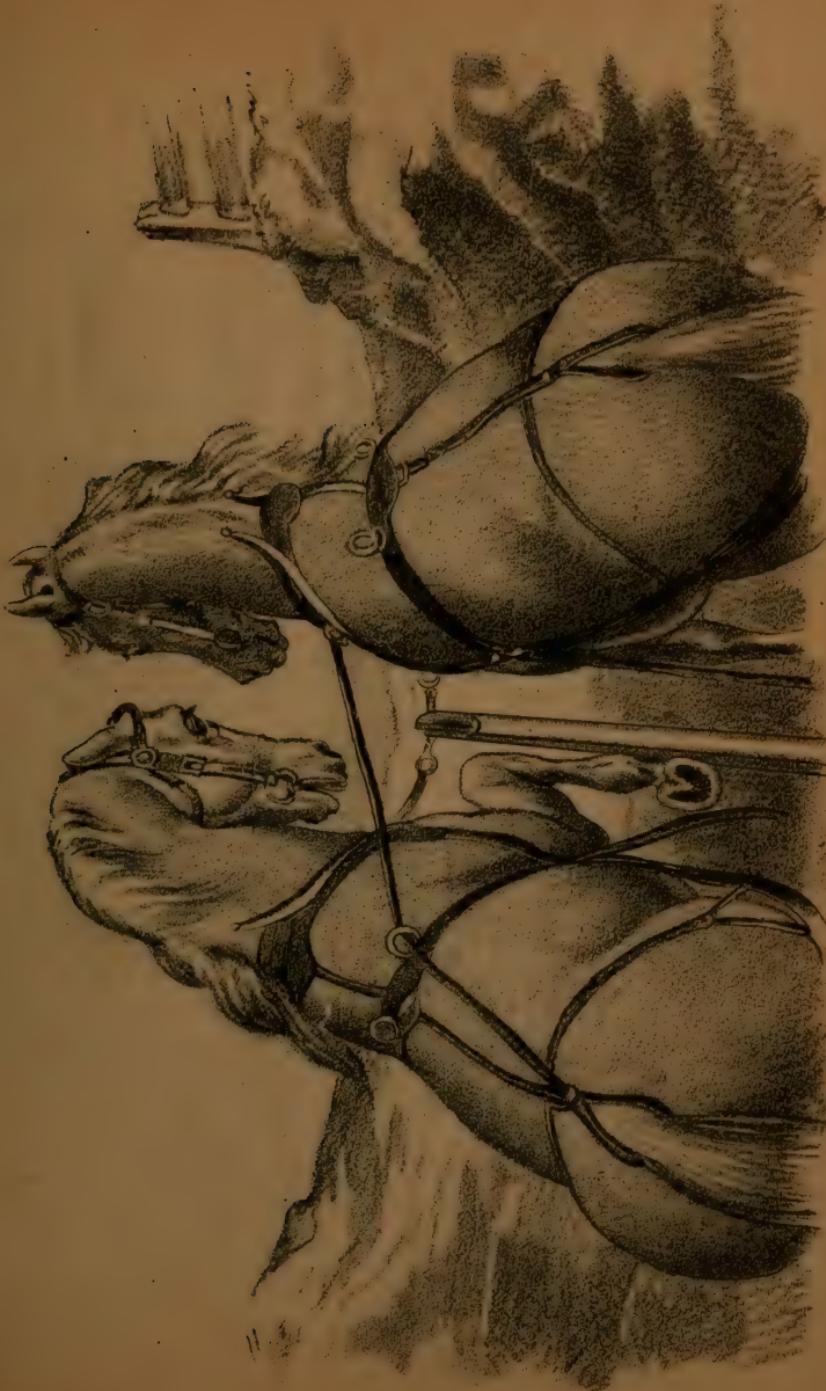
Horses Baulking.

(See Engraving No. 7.)

This is the most aggravating of all the habits to which the horse is subject; it tries the patience of man to the utmost; yet, by patience and perseverance, with proper management, even this habit can be broken up. It is rarely we find a baulky horse which is not a good one. They are usually very high spirited, quick of comprehension, and of a strong nervous temperament. They resist because we have failed to make them understand what we require of them, or it may occur from overloading sore shoulders, or working until tired out. Particularly is this the case with young animals. To whip under such circumstances only excites them to more determined resistance. On the first attempt of your horse to baulk, get out of the wagon, pat him upon the neck, examine the harness carefully, first upon one side, then upon the other, speaking encouragingly to the animal while doing so; then jump in the wagon and give the word to go;

No. 7.

HORSES BAULKING.



generally he will obey; if he refuses to do so, take him out of the thills, put up the traces so that they do not drag upon the ground, then take him by the head and tail, reel him until he is almost ready to fall, then hook him up again and give him the word to go. This rarely fails. It takes that sullen spirit out of them, and they start at the word.

I have failed but once in handling baulky horses, though I have handled a large number of them. By repeating the same operations every day for a week, usually breaks up this most perplexing habit thoroughly and permanently.

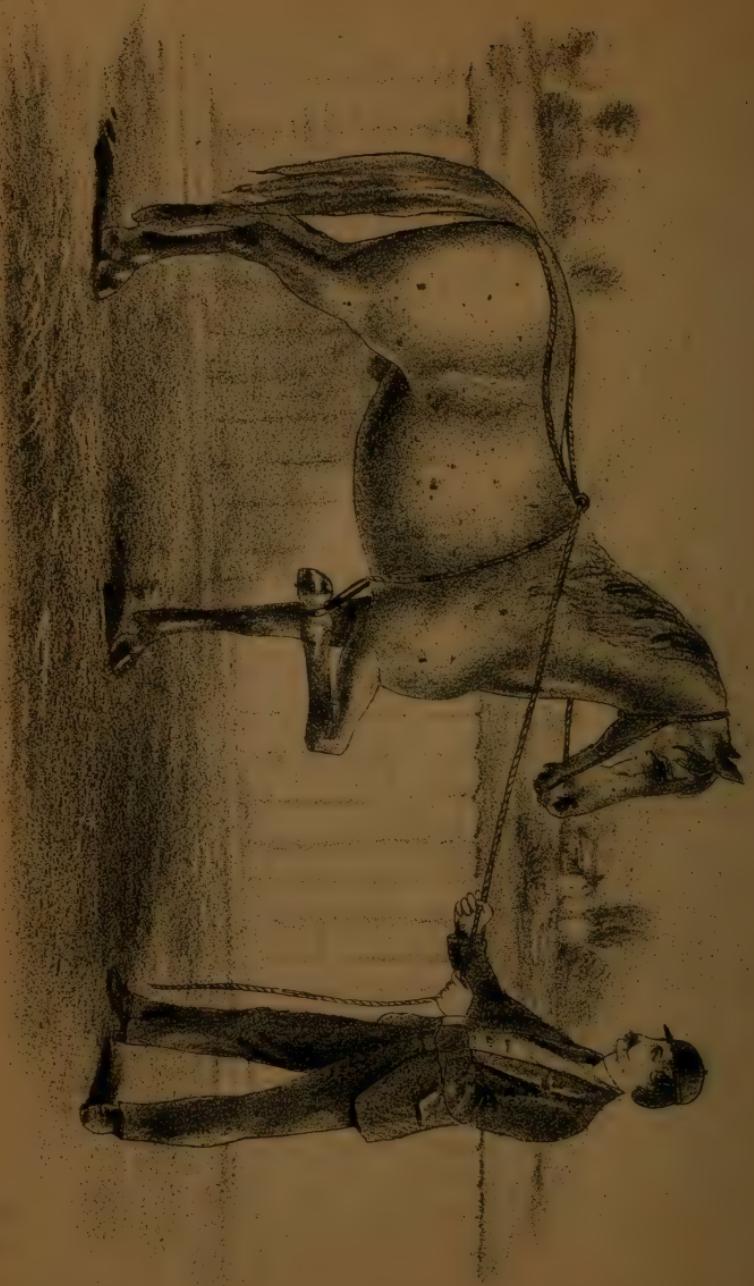
Another method, which often proves successful to break a horse in double harness, is to take a hemp cord, pass around under the tail, bring forward through the terret-ring of the baulky horse and fasten to the ring of the other horse's collar or hame; when the other horse starts, the baulky one can do no other way than move with him, which, in a short time, if the horse is hitched single or double, by taking your whip or any common stick and place on the backs of the crupper-strap, the horse will start readily.

Throwing the Horse.

(See Engraving No. 8).

The only practical method of throwing a horse is easy to the person handling the horse, and safe. The horse lays down quietly—almost as easy as when lying down by himself in the stall. To perform the work, procure a rope or any strap long enough to pass around the horse, and tie in a knot on the back with an iron ring, small size, tied fast; pass the end of the strap or rope around under the tail for a crupper; bring the end back, fastening to the belt around the body; then take a small cord of sufficient strength to hold your heft; pass around the horse's neck; tie in a knot that will not slip; then pass the cord through the horse's mouth, and stroll back to the ring on the horse's back; when that is accomplished, pass a strap around the near fore foot twice, and through the keeper, strapping the foot to the belt around the horse; when that is done, step back from the horse, taking hold of the small cord, pulling gently till you have the head to the side; then, with a quick pull, bring the horse to the ground, with his knee to steady him as he falls. It can be done with ease and safety. Whatever may be the bad habit of your horse, it is a very good plan to give him a regular course

THROWING THE HORSE.



No. 8

of training, and, by throwing a horse down, and handling him just as you please while down, demonstrates to the understanding of the animal that it is worse than useless to try to resist control. It is the best way we have ever found to handle nervous horses. After handling gently while down they find they are not hurt, and get over their fear, and will allow you to do with them as you like anywhere.

Pulling at Halter.

(See Engraving No. 9.)

Place on him a common halter head stall. Put on a common girth. Take a half-inch rope, about twenty feet long. Pass the centre of this rope under the tail in place of a crupper; twist the rope over a couple of times; pass the end of the rope under the girth, bringing an end up on each side of the neck, and pass the ends through the nose-piece of the head-stall under the cheek-pieces, and tie to a stout ring or place, leaving about three feet play of rope. As soon as the horse falls back, being tied by the tail to the ring, he pulls upon the tail, and the hurt coming there instead of the head, where he expected it, he starts up, it being natural to go from the hurt. By giving him two or three lessons, making him fall by whipping him over the nose or exciting him with an object, he is afraid of the impression being made too strong, will not forget it, and the more so by repeating for one month, or more lessons at different times.

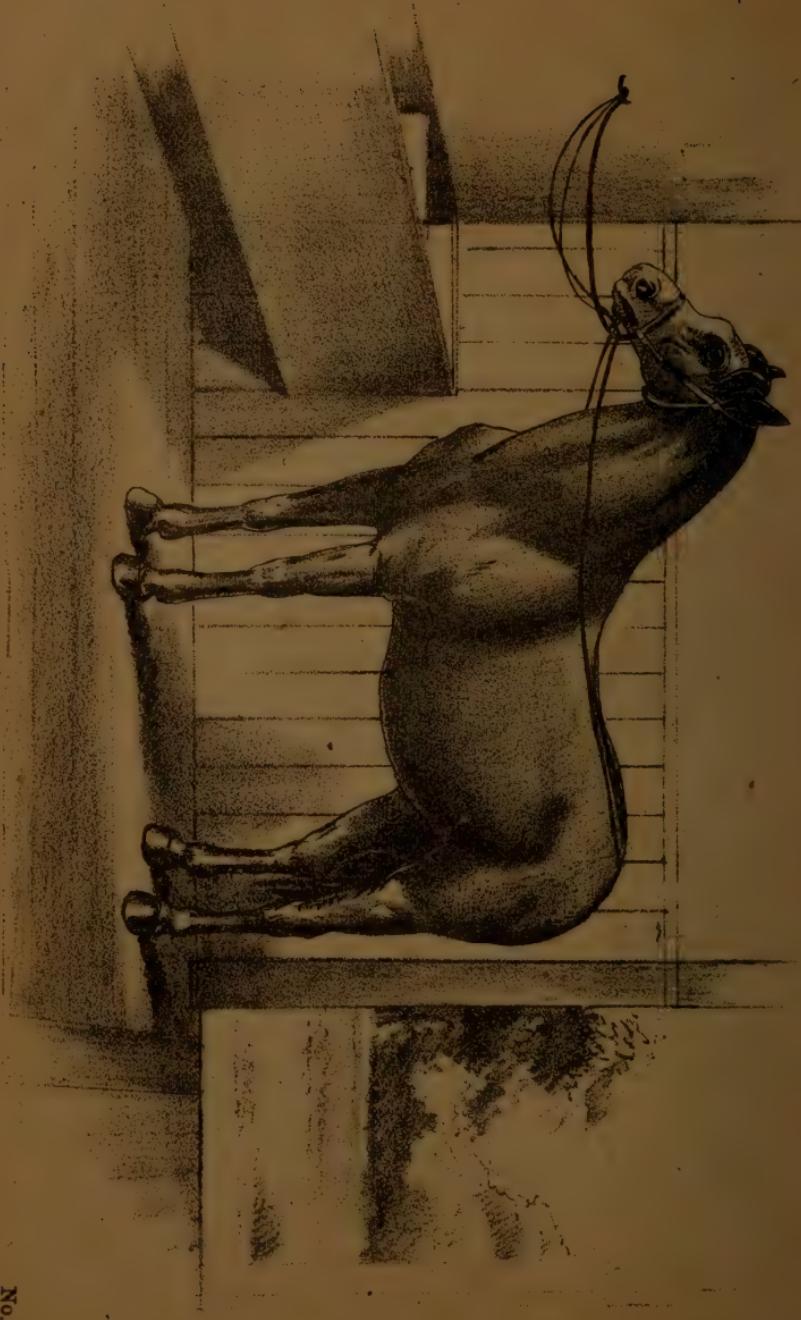
To Break Horses from Jumping.

(See Engraving No. 10.)

Tie straps to the fore feet, below the knees, pass it up under a surcingle around the body, and tie the other ends above the fetlock to straps inclosed in a ring, so one will go above, and the other below, the fetlock. You will see that when he attempts to jump a fence the fore foot is drawn up under him, and, as he springs to leave the ground, the hind feet will be pulled up, and he will inevitably remain in the lot. The value of this plan is that it will in most instances cure a horse or cow of the habit.

Pawing in Stall and Kicking of One Foot.

Get a piece of chain ten inches in length, run a short strap through one of the end links and buckle it around the foot above the fetlock, or

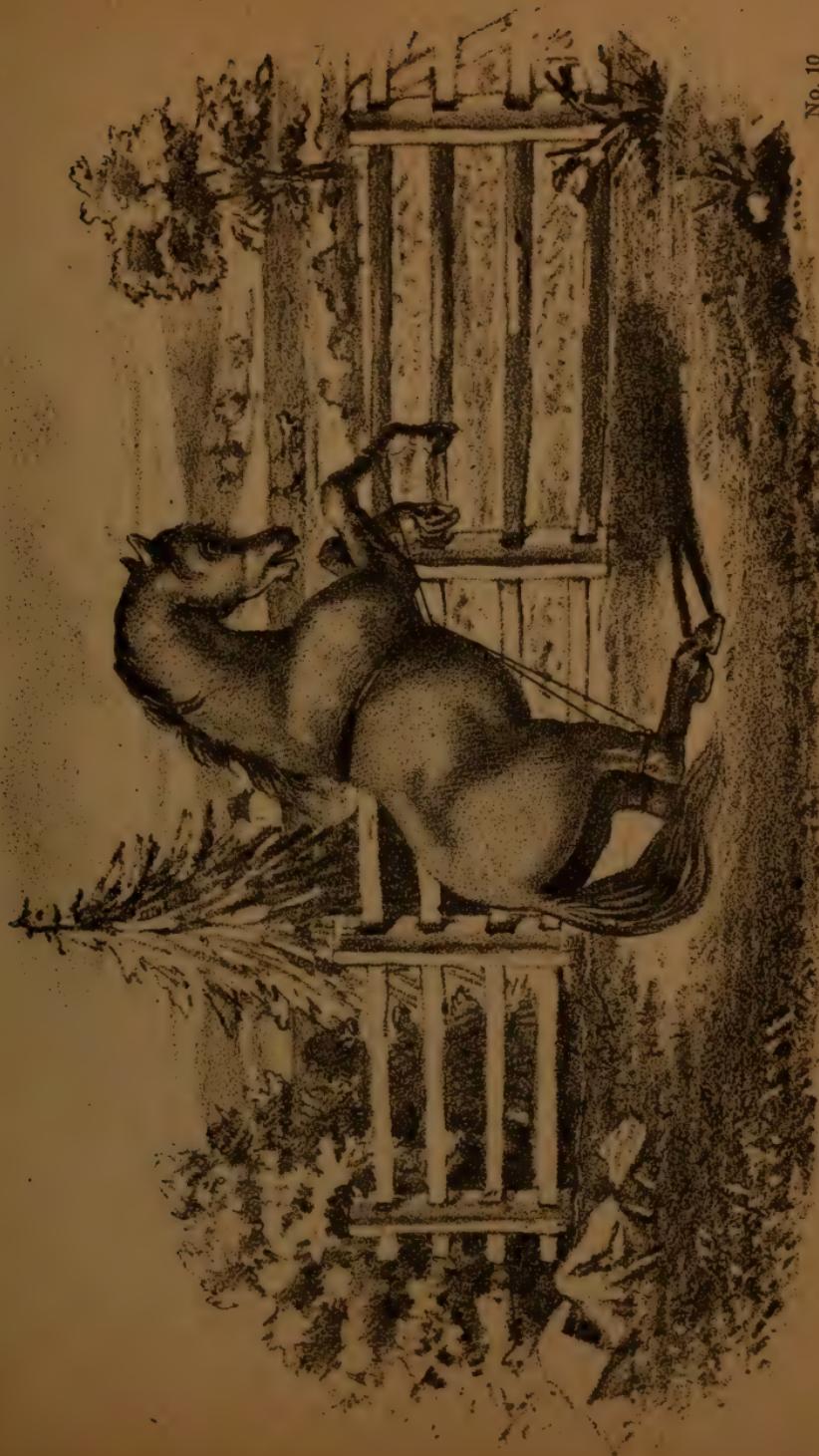


PULLING AT HALTER.

No. 9.

No. 10

TO BREAK HORSES FROM JUMPING.



a piece of light chain can be fastened to a single block, and attach it to the foot in the same manner. When the horse attempts to paw or kick, the clog or chain rattles against the foot and prevents a repetition of the practice.

Cribbing Horses.

The surest remedy of breaking a cribber is to trade him off.

Lead Horse Behind Wagon.

(See Engraving No. 11.)

To lead a horse behind a wagon, take a stout cord or small rope, and place under his tail, cross on the back, run through the rings of the halter; first hitch him to a post, and, by hitting him over the nose with something, or to excite him, make him pull, which will satisfy him of his useless attempts at holding back on the halter; then hitch him to the wagon, and you will find no trouble in riding home without the many inconveniences of leading.

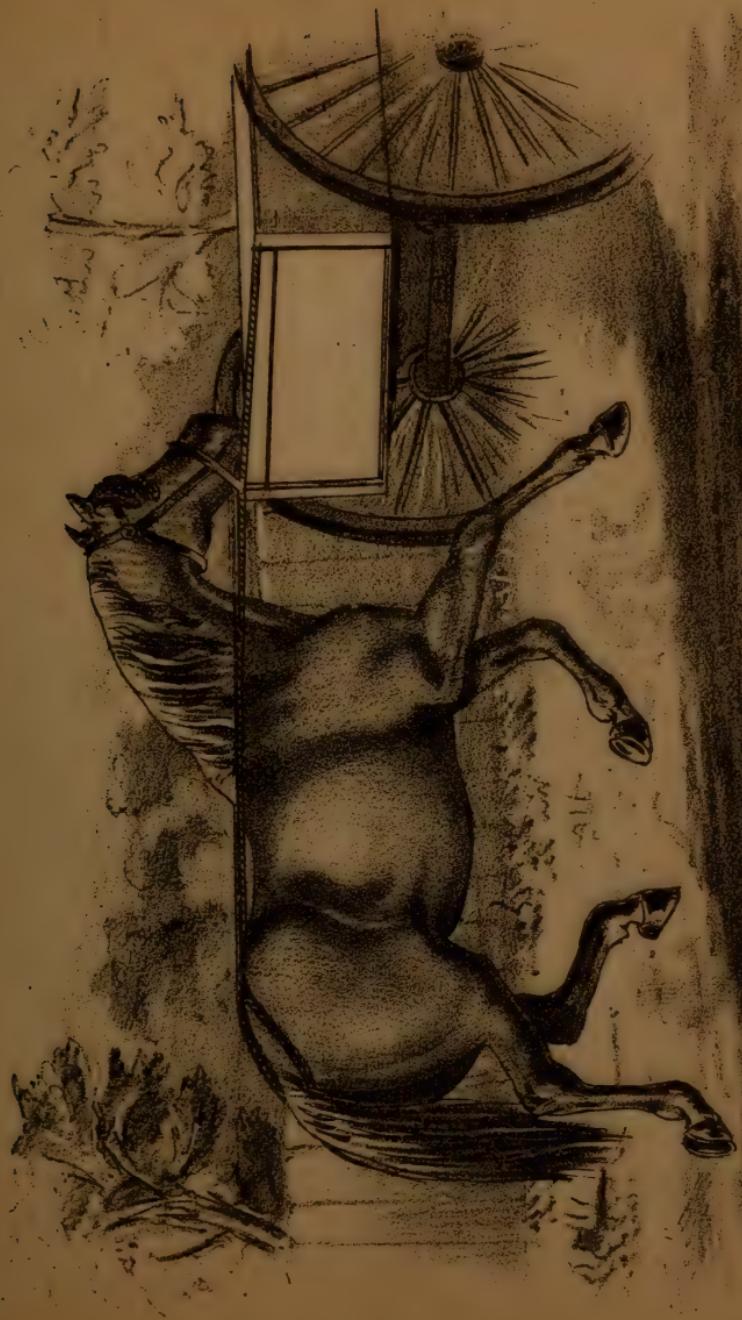
Kicking in Harness.

(See Engraving No. 12.)

Kicking may justly be regarded as a bad habit, because of the danger incident to the use of such horses. It is well to remember that this habit is in most cases the result of carelessness or mismanagement. Proper attention is not given to the fitting of the harness; the straps dangle about the flanks of the colt, unacquainted with their nature, which frightens and causes him to kick. Or, what is more common, an old harness is used, and breaks at some unlucky moment, which frightens the colt, and he kicks as a means of self-defence, when his feet and legs, coming in contact with the whiffletree or cross-piece, causes him greater fright, and he becomes reckless, springs ahead in a frantic endeavor to free himself from his tormentor, until he tears himself loose, or is stopped after being worried out with fright and exertion. Learning fear and resistance in this way, he becomes alarmed at the least indication of its repetition. This fear must be broken by familiarizing the horse with the cause of his fear, at a time when he is powerless to resist, and, when he finds there is no danger of harm, he will cease resistance. In the majority of cases this habit is broken by our means of control.

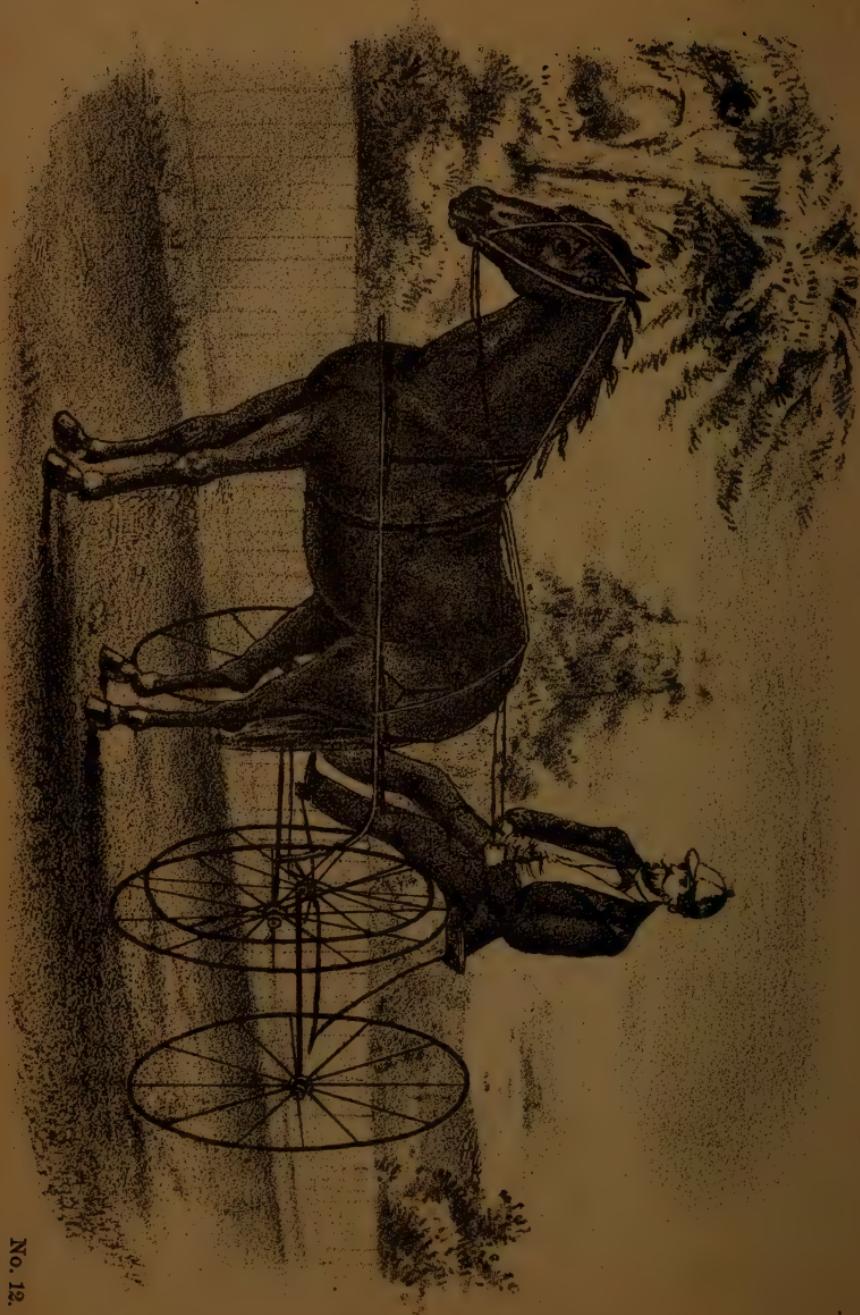
LEAD HORSE BEHIND WAGON.

No. 11.



KICKING IN HARNESS.

No. 12.



To break the kicking horse, you want to put him through a regular course of handling that will convince him of your ability to manage him just as you please, while at the same time you demonstrate to his understanding that he cannot help himself, and must submit unconditionally to your control. In the first place, then, give him a turn with the Camanche bridle, making him stop at the word "whoa!" and come to you at the word. When he submits to that, proceed still further in convincing him of your power and mastery by throwing him down. To do this, fasten up the near fore leg, as described in "Handling the Feet." Now put a strong surcingle, with a ring slipped on it, around the animal, and slip the ring to the right side of the horse, near the backbone. Now draw the end of your cord or Camanche bridle through the ring, bringing it over to the near side of the animal; now take the halter out of the mouth, thus leaving a plain loop around the horse's neck; then take hold of your cord with the left hand and straighten it out. Now you have a plain double from the neck of the horse around to the ring on the right side; you put this into the horse's mouth, and draw up the end of the cord with the right hand. Now you have him completely in your power; you can handle him as easily as a boy could a top. Now step back by his side with the cord grasped firmly in your hand, and say, "Lie down, sir," at the same time pulling steadily on the rope. His foot being fastened up, he is easily thrown off his balance. He will gradually settle down on to the knee of the near leg, when a quick pull will bring him over on his side. Now you have him down, use him gently; rub his head and neck, talk to him kindly, thus letting him know that your object is not to hurt him—that all you require is submission, and that you possess the ability to enforce that. After letting him lie for a while, make him get upon three legs, let him stand a moment, then put him down again. While down, handle his feet and legs as you please, and so continue until he will lie still and submit to you in everything you wish. Then take the strap off his leg and let him get up; caress and rub his leg where the strap has been. Now put the harness on. Use a blind-bridle with a W bit (or some call it a double-joint bit), and, if you cannot obtain one at your harness maker's, go to a blacksmith and have one made. With this kind of a bit on your horse, you want to drive him around your yard, occasionally saying "Whoa," at the same time setting him back upon his haunches with the bit. In a very short time he will stop when

you say "whoa," without any pull on the rein; then go up to him and caress him about the head and neck; then take your whip and switch him around the hind legs and flanks, lightly, and, if he shows a disposition to kick or run, say "Whoa," sharply, at the same time correct with the bit. In your first lessons use the bit with severity, thus demonstrating to the horse your determination and ability to enforce obedience under any and all circumstances of resistance. When you can drive him around with a whip at a trot, and stop him at the word without using the rein, go to him again and pat and rub him to encourage him in well-doing. Then attach the long cord to your reins, and start him away from you at a trot, letting him go as far as the length of your cord will permit without pulling on the bit, when you will say "Whoa." If he stops, go up and caress him, and keep on in that way until he will stop and start at the word, no matter how far away he is, so long as he can hear your voice. After you have him so well in hand that he obeys readily and willingly, take the reins in your hand and learn him to back, encouraging him by kindness when he does right, and correcting with the bit when he shows the least intimation to be rebellious and stubborn. When he will back at the word, back him against your buggy-wheels, keeping an eye on his movements, and, if he shows fear and a disposition to get away from it, do not force him against it at first, but drive him around and up to it, letting him smell and examine it until he becomes satisfied it is not going to hurt him; then back him up to it again—right back against it—and if he is disposed to kick, say "Whoa," sharply, at the same time giving him a short, quick jerk with the rein. By this treatment he finds that you still have the same power in your hands that has already controlled him so completely and easily; therefore, he submits unconditionally. You can now proceed to hitch him up; watch him closely, and if anything should excite him momentarily, and he should manifest a desire to repeat his old habit, say "Whoa," and if he does not obey instantly, set him back with the bit in a manner that shall leave no doubt of your ability to control him at will. If handled in this way for a few times, he becomes convinced of the uselessness of resistance, and careful management for two or three weeks will radically break the worst horse of this kind we ever saw. People have often expressed wonder at our success in managing kicking and runaway horses. The simple laws of Nature are to such unworthy of reflection, except the submission of the ani-

mal, the control is looked upon as the result of a peculiar gift. But we do control them perfectly and thoroughly by the word "whoa." In breaking to the word, we use means that compel obedience. If your horse minds the word quickly and stops at your bidding, he is not going to do you or himself any damage by kicking; for if you stop him whenever the old habit is brought to mind, and let him stand until the excitement is over, he will have no incentive for kicking, and in a short time will forget the habit altogether. So with

The Bunaway Horse.

Handle with the Camanche bridle, and by throwing the same as the kicking horse in harness, unless the habit is caused by fear of some object, such as an umbrella, buffalo robe, or anything else that may frighten him and cause him to run away; if that should be the case, when you have him down take the frightful object—whatever it may be—around him, throw it on to him, at the same time rub and caress him: let him know it is nothing that will hurt him; then let him up; put it on or over him, rub him with it; and in that way familiarize him with it until he cares nothing about it. Then train him in harness until he will mind the word "whoa." Make him run, and if he does not stop at the word, stop him by the bit so suddenly as to disconcert him and destroy his confidence completely.

Although we have given a powerful means of coercion, and of impressing the horse of his inability to resist the power of man, still, practical and thorough as those means are, they are of but little account if not used with prudence and judgment. Men are too apt to depend upon main strength and stupid harshness for success in the management of horses. And with equal stupidity, the basis of control we have here given may be made in the hands of some a power to be abused with reckless disregard of consequences. Be firm, persevering and prudent in the exercise of your power when it is necessary to impress your subject with a sense of mastery; but be gentle, attractive and affectionate when he is obedient and submissive. Train your horse thoroughly with the Camanche bridle each time before hitching up. We find by experience that horses subject to bad habits are ungovernable in the mouth. If we govern the mouth well, we have, in almost every instance, a good control of the horse; and it is an important requisite, under all circumstances, in the control of horses in harness. Then control while driving, until thorough and

certain obedience is insured to the word. Strive to tell your horse exactly what you want him to do, and do not confuse him by attaching different meanings to the same word. It is quite common to say "whoa" when it is intended to go slower, or to attract the attention of the horse when standing, to let him know of your presence. Now, if anything should happen, and you wished him to stop suddenly, he would not be likely to mind without a pull at the bit; and why should he, as long as he has been learned, in that hap-hazard way, that "whoa" meant anything and nothing at the same time? Such training confuses the horse so much that, though he is naturally obedient and tractable, he will become careless and obstinate. Have a distinct word for every command, and make him understand that every command must be obeyed. Speak in a natural tone of voice to your horse under all circumstances. Nothing confuses a horse more than screaming at him to have him hear. He is as acute in the sense of hearing as a man, and so sensitive, if nervous, as to have his pulse increased from six to ten beats a minute by one harsh word. Have your horse understand that things likely to frighten are harmless, and be sure not to whip for being frightened. If your horse is frightened at anything approaching, let him stand until it passes, but hold the reins snug and firmly, or he may swing round and upset you. If cars are passing, and are regarded with fear, let your horse face them, but hold him immovable with the reins. Always, under such circumstances, talk encouragingly to him, remembering the slower you move him the more power you have over him. There is but little danger of a horse kicking after being stopped or while moving slowly, and so with the runaway. He will seldom make a second attempt at the time he has been foiled and stopped. A horse frightened becomes reckless; consequently, never raise an umbrella suddenly or unexpectedly behind a horse afraid of such things. First raise it at his head and gradually carry it back, and then, to make sure, if you have not a bit that will control your horse easily, put on a Camanche bridle and carry it back in the wagon or buggy. Fear and anger is something that a good horseman should never exhibit in his countenance or voice, as the horse is a close observer, and soon learns to take advantage of such indications to become careless, or, excited by anger, may become aggressive or unmanageable. Let your lessons be thorough, but not very long. Be gentle and patient with the colt, but make the willful, stubborn horse feel the full

extent of your power. Make the old reprobate know that the only alternative is unconditional submission to your will; though, if he should become too much heated and excited, it is prudent to stop, and repeat the lesson at some future time; but repeat until there is thorough and unconditional submission. After a horse submits, let your treatment be characterized by gentleness and good nature.

Bridle to Ride a Wild Horse.

(See Engraving No. 13.)

To Drive a Colt before being Harnessed.

(See Engraving No. 14.)

Place on him a Bonaparte bridle, with the cord eighteen or twenty feet long, driving him around you in a circle, first one way, then reverse and drive the other, your rope acting as a lead and drive-rein; stopping him at the word "whoa," and starting him by the usual word, until he will stop and start at the word of command; then place the lines in the tug-strap, and drive carefully around the yard.

To make a Horse Turn his Body when he Turns his Head.

(See Engraving No. 15.)

Place the lines in the shaft-straps, dropping them around his quarters, when, by turning his head, you can force him to turn his body; and, after a few lessons, when you pull on the reins, the body will give freely with the head.

To Break a Horse of Kicking at its Mate in a Stall.

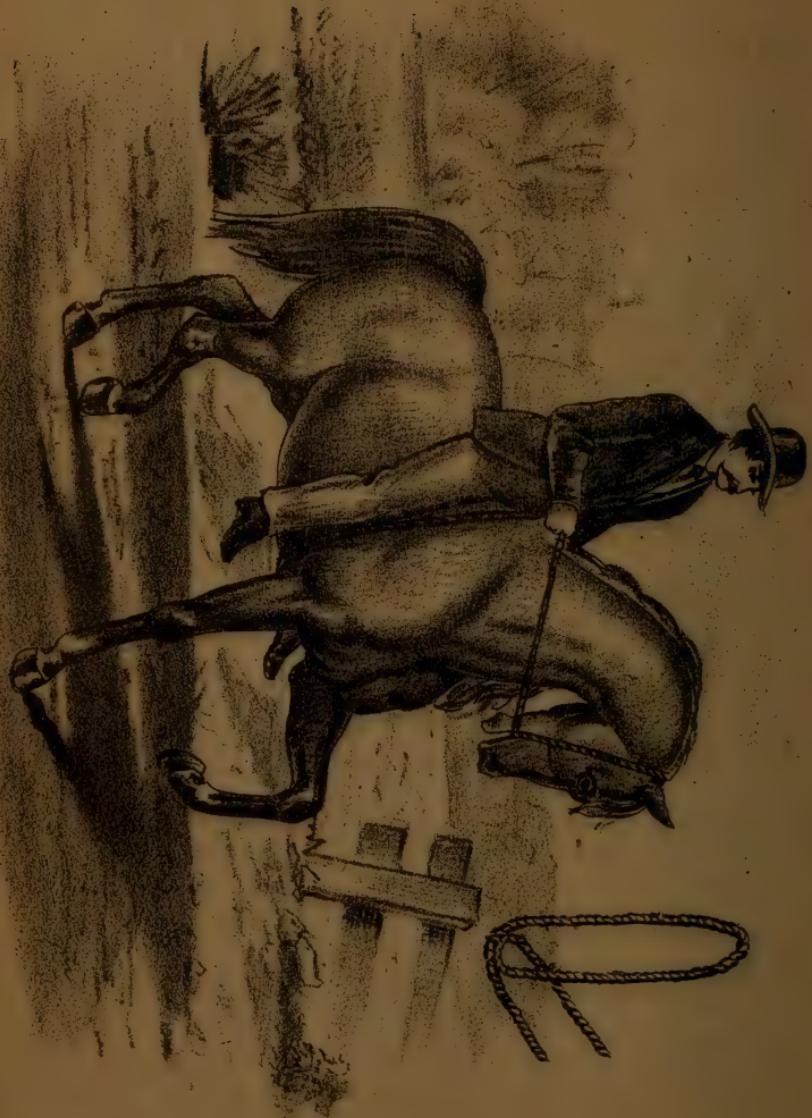
(See Engraving No. 16.)

Put on the Bonaparte bridle, with the small loop on the lower jaw, letting the cord pass back to the hind leg. Attach it to a small ring, fastened around the leg, with two hame straps above and below the gambol joint.

To Break a Horse of Kicking at Persons Entering the Stall.

(See Engraving No. 17.)

Put on the Bonaparte bridle, making a loop around the lower jaw;



BRIDLE TO RIDE A WILD HORSE.

NO. 13.

No. 14.

TO DRIVE A COLT BEFORE BEING HARNESSSED.



TO MAKE A HORSE TURN HIS BODY WHEN HE TURNS HIS HEAD.

No. 15.



pass it up over the head, and down through the loop on the jaw. Run the cord through a small ring, fastened by means of a staple to the side of the stall, a little back of the horse's head. Pass the cord back to another ring fastened in the side of the front of the stall. When you enter the stall pull on this rope, and, at the same time, say, "Go over." The head of the horse will be thus drawn towards you, and his heels *must* go to the other side of the stall. Most horses will be broken of this very dangerous habit in two or three lessons.

Luggers on the Bit.

Buckle a pair of straps about twelve inches long, with a ring at one end, and a buckle at the other, to the check-piece, and let the straps pass through the rings on either side of the bit; buckle the lines to the rings on these straps, instead of the rings on the bit; this forms a gag similar to the French twitch gag, and is a powerful means of controlling the mouth of a hard-pulling horse. Also place a hame-strap around the nose, so they cannot open the mouth.

To Harden a Tender-Mouthed Horse.

Place the bits in the animal's mouth as low as possible, not to have them drop out, and drive him from two to three weeks with the bits in this way, and when they are buckled up in proper place he is hard-mouthed.

Lolling the Tongue.

Some horses have the habit of carrying the tongue out of the side of the mouth. This is generally confined to a narrow-jawed horse. The space between the molar teeth being too narrow to contain the tongue in the mouth when the bit presses upon it, without coming in contact with the edges of the molar teeth. To prevent this, the tongue is thrown out over the bit, and hangs from one side of the mouth. To remedy this defect, take a common bar-bit, and drill a hole on either side, about three-quarters of an inch from the centre of the upper surface of the bit; then take a piece of sole leather, four inches long and two inches wide, sprinkle it over with rosin and burn it into the leather. This renders it proof against the action of the saliva in the mouth. Drill two holes in the centre of the leather, corresponding with those in the bit, and secure both together by

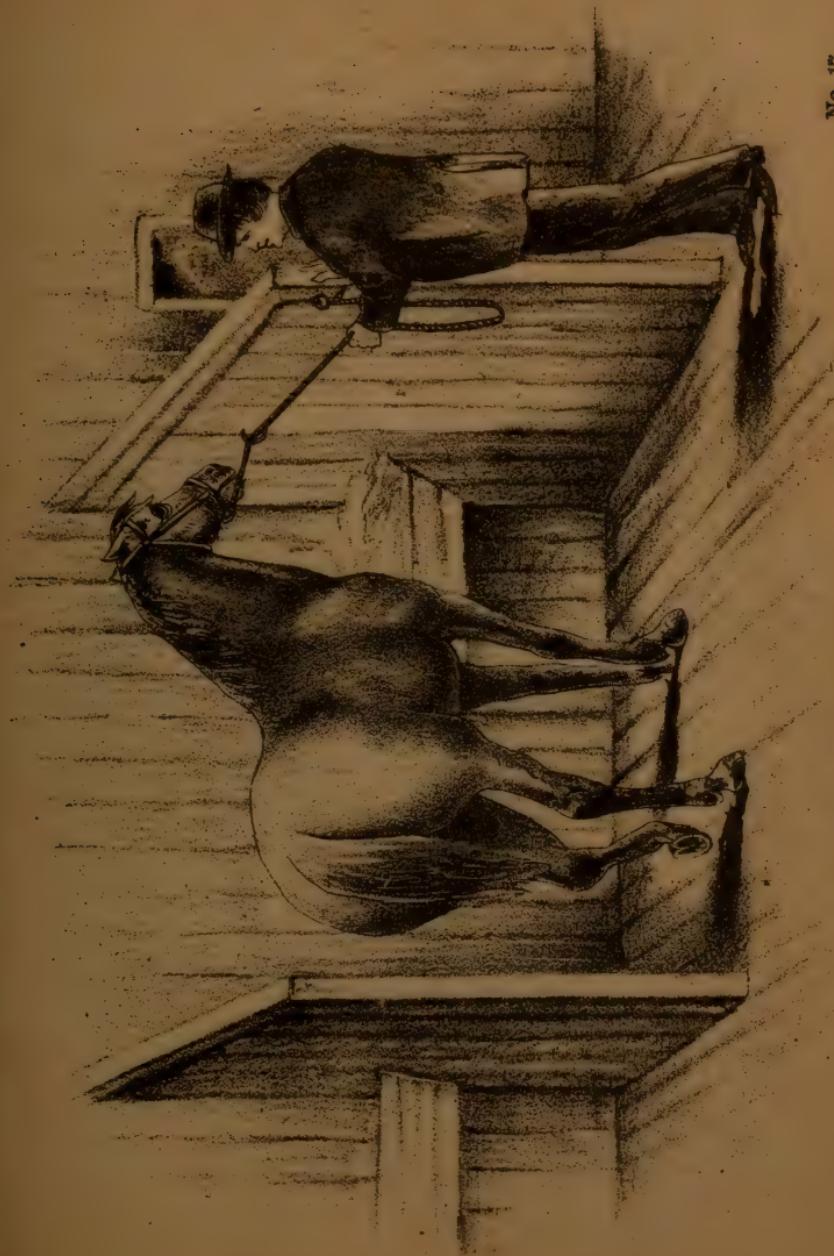
TO BREAK A HORSE OF KICKING AT ITS MATE IN A STALL.



No. 16.

No. 17.

TO BREAK A HORSE OF KICKING AT PERSONS ENTERING THE STALL.



rivets, so that the leather extends two inches above the bit, and two inches below it. This put in the mouth keeps the tongue down clear of the molar teeth, and prevents the animal getting it over the bit.

Hugging the Pole.

This is a great annoyance to the other horse, and he will probably learn to do the same thing, not from imitation, but from leaning inwards, so as to enable him to stand against the other horse leaning upon him. This habit may be broken up by securing a piece of sole leather to the pole upon the side where the animal leans, having a number of tacks driven through it in such a manner as to protrude from the leather towards the horse.

Ugly to Bridle.

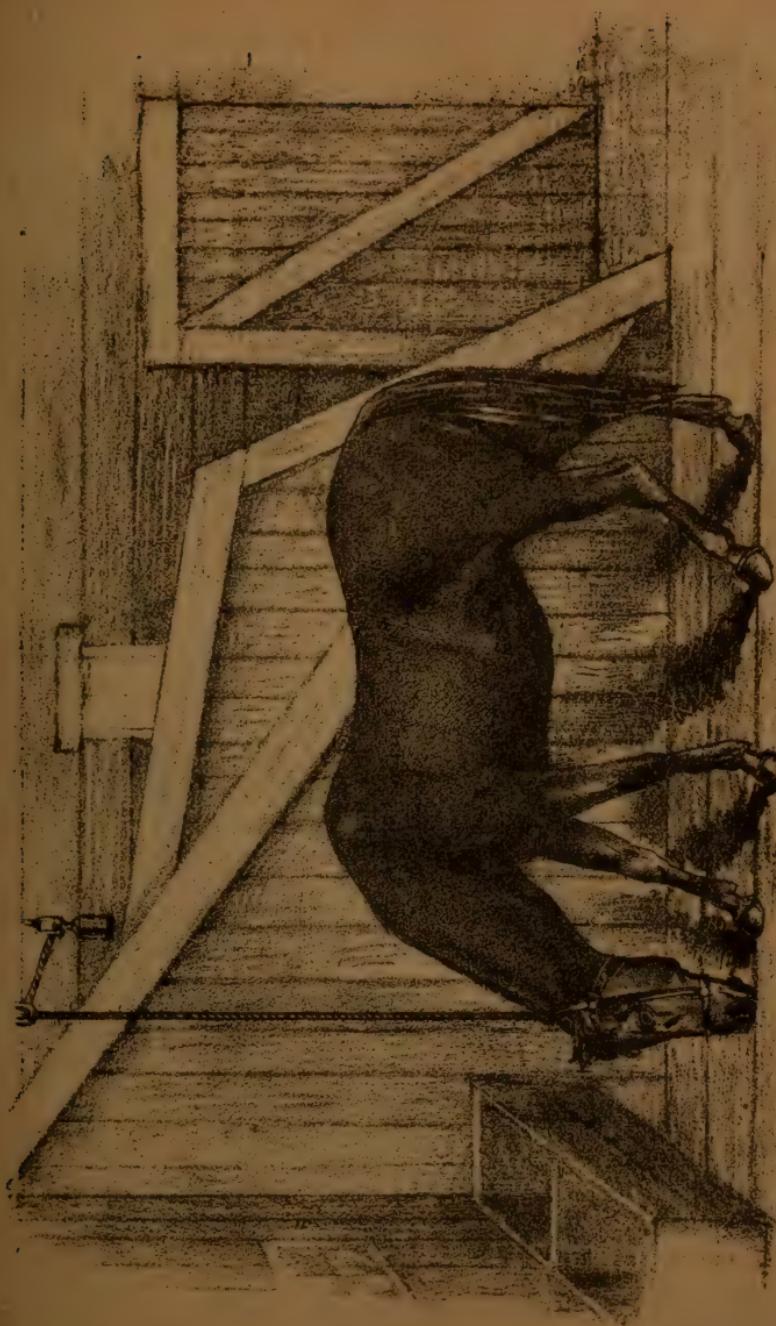
Some horses are ugly to bridle, from having been knocked, or roughly handled, about the head. Horses are occasionally troubled with tender ears, and have some tenderness about the mouth; such animals refuse to be bridled from fear of being hurt; nothing but kindness and careful handling will accomplish our purpose. In such cases, where the habit arises from previous injuries, or from ugliness of disposition, take a cord, put the end in the mouth, draw it tightly and take a half-hitch: this confines the head and prevents the animal from raising it. In this position the horse will allow you to put on and take off the bridle at pleasure. After putting it on, remove it several times, unloose the cord and repeat the bridling. Every time the animal resists draw the cord tightly.

To Educate a Horse not to Get Cast in the Stall.

(See Engraving No. 18.)

Drive a staple in the ceiling over the manger at the side of the stall, then another in the ceiling in the center of the stall over the horse's head; pass a small cord through the staple at the side of the stall; tie a horseshoe, or the weight of a horseshoe, so that the cord will not draw through the staple; then put the cord through the staple in the center of the stall, bring it down within two and a half feet of

No. 18.



TO EDUCATE A HORSE NOT TO GET CAST IN THE STALL.

the floor, and cut it off, attaching a snap to the end; place a ring in the halter at the top of the head, in the center. Now, when his head raises up, the weight comes down; when his mouth is on the floor he can lie down with ease, but he cannot get the top of his head to the floor; and, if he cannot get the top of his head to the floor, he cannot roll; and, if he cannot roll, he cannot get cast. This remedy is as simple as it is certain, and is always perfectly safe.

The only Practical Way to get a Horse up that Throws Himself.

(See Engraving No. 19.)

Practical Method of Giving a Horse Medicine.

(See Engraving No. 20.)

Horse Bad to Catch.

(See Engraving No. 21.)

First use Camanche bridle, as applied in breaking wild colt, then adopt the plan as shown in the engraving.

To Educate Colt or Horse not to be Afraid of his Heels.

(See Engraving No. 22.)

This method should be applied to all young horses when breaking to harness.

Horses Afraid of the Cars.

(See Engraving No. 23.)

Place on the horse the bridle seen in the engraving, or you may place a strap over the head and through the mouth, and buckle tight, which, by pressing on the brain, will bring the horse to subjection. By either one of these instruments you may lead the horse up to the cars, being careful to caress him, and give him confidence that you are his friend. Be sure not to have rope or strap on too long. As he shows less fear lessen the punishment; and in two or three lessons you can drive him with safety about the cars.

No. 19.

THE ONLY PRACTICAL WAY TO GET A HORSE UP THAT THROWS HIMSELF.



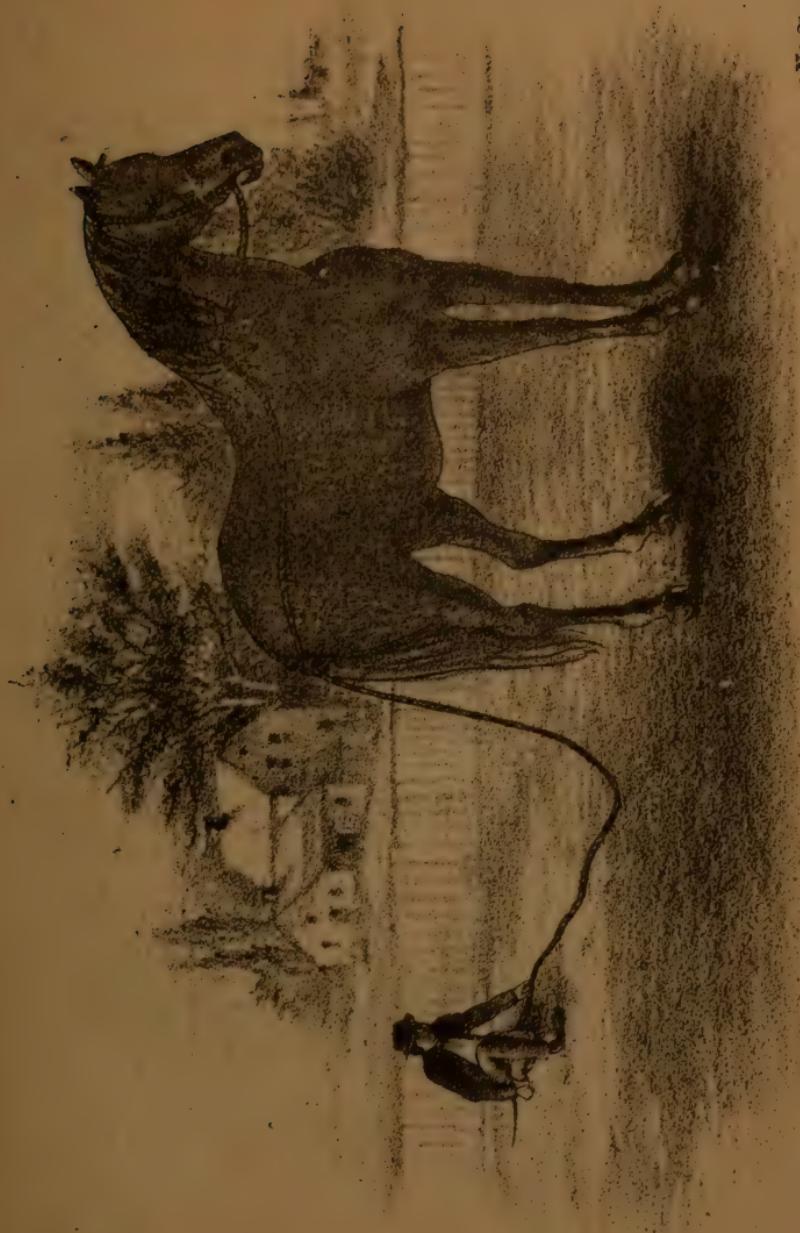
PRACTICAL METHOD OF GIVING A HORSE MEDICINE.

No. 20.



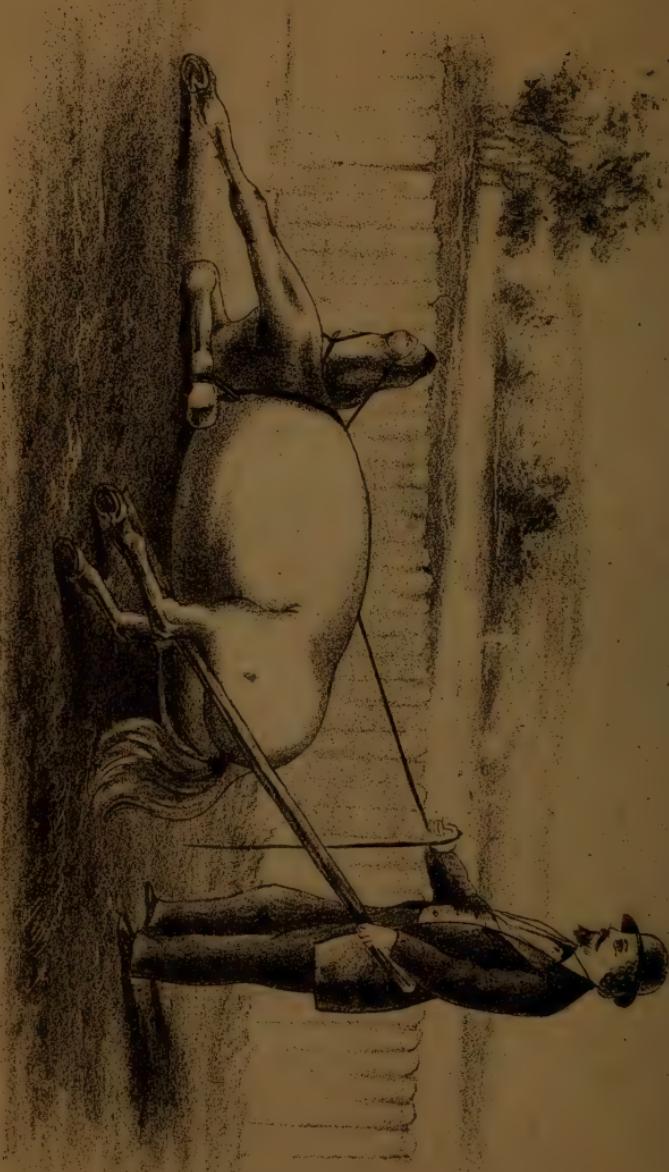
No. 21.

HORSE BAD TO CATCH.



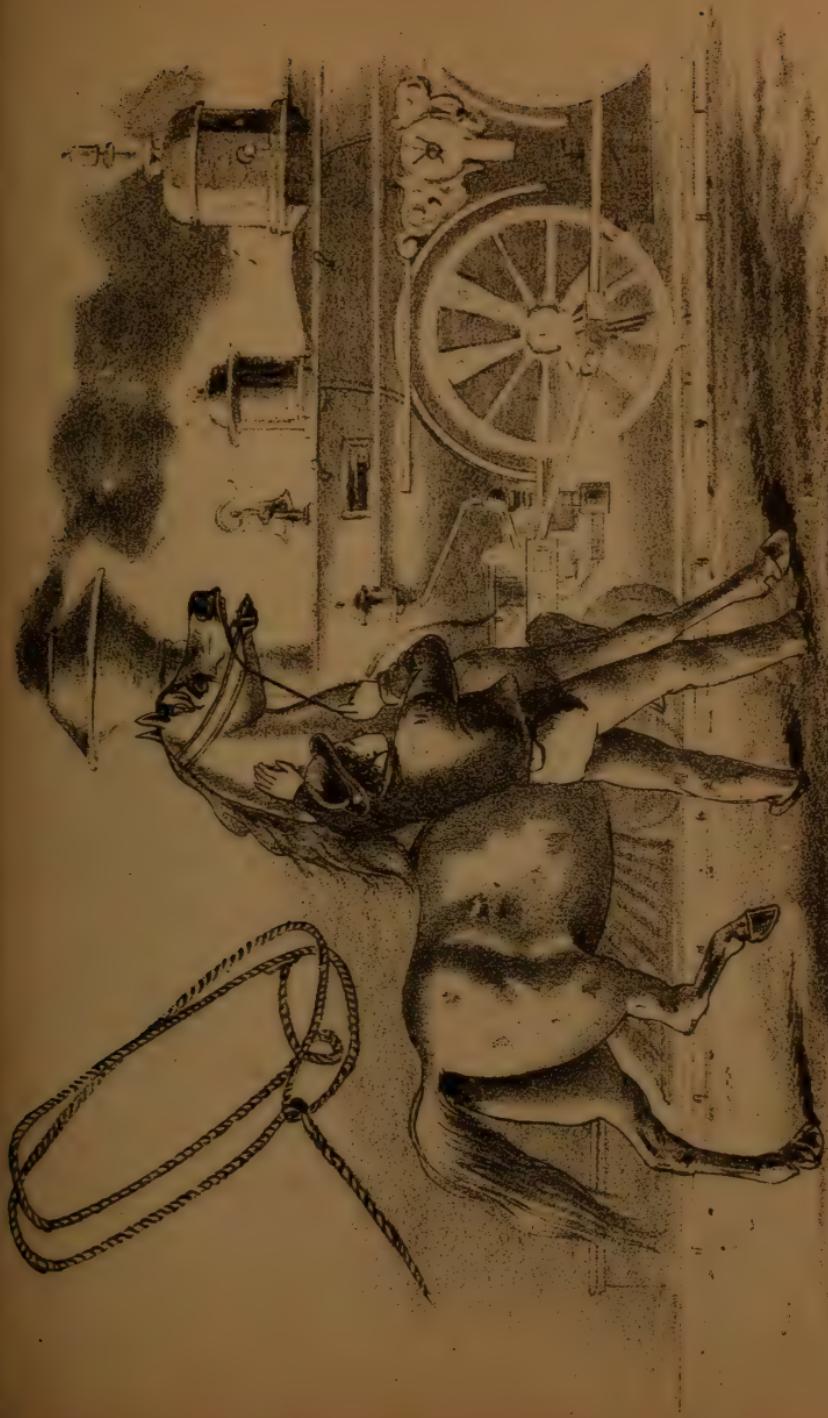
TO EDUCATE COLT OR HORSE NOT TO BE AFRAID OF HIS HEELS.

No. 22.



No. 23.

HORSES AFRAID OF THE CARS.



Sure Way of making a Horse Bad to Catch.

(See Engraving No. 24.)

To Break a Horse to Trot which is a Pacer.

(See Engraving No. 25.)

Take four hame-straps, two on each hind leg, with a ring attached on the front of the leg to both straps; also place on each front leg a strap just below the knees; then place on the horse a leather surcingle, fastening a strap from the nigh front leg to the hind off one, crossing them under the belly; now commence to drive your horse slowly, as the new action may cause him to stumble; continue to increase his movement, and in a few moments you will have the pleasure of seeing your pacer trot.

To Break Single-footed Horse to Trot Square.

(See Engraving No. 26.)

Put on straps as seen in engraving, moving slow at first, and, by the time you have gone half a mile, your horse, at his full rate of speed, will be trotting square. Continue to exercise for a number of times, till your horse has got confidence in himself; also, be careful not to drive a horse of this class with too much weight or load behind him.

To Break Horse Afraid of Umbrella or Buffalo Robe.

(See Engraving No. 27.)

Place on the horse bridle (as seen in engraving 23, for cars) of straps explained. Present the umbrella or buffalo-robe, allowing him to smell of it; then rub it across his nose and head; open it gently, at the same time allow him to smell of it several times; work gently till he becomes reconciled to it, and in a few lessons you will be able to use the umbrella in any place around him.

Horse Bad to Groom.

(See Engraving No. 28.)

Put on the bridle seen in the engraving, standing at his side with the cord in your hand; with the other hand use the curry-comb or brush; if he should kick or resist, you pull quickly on the cord, at the

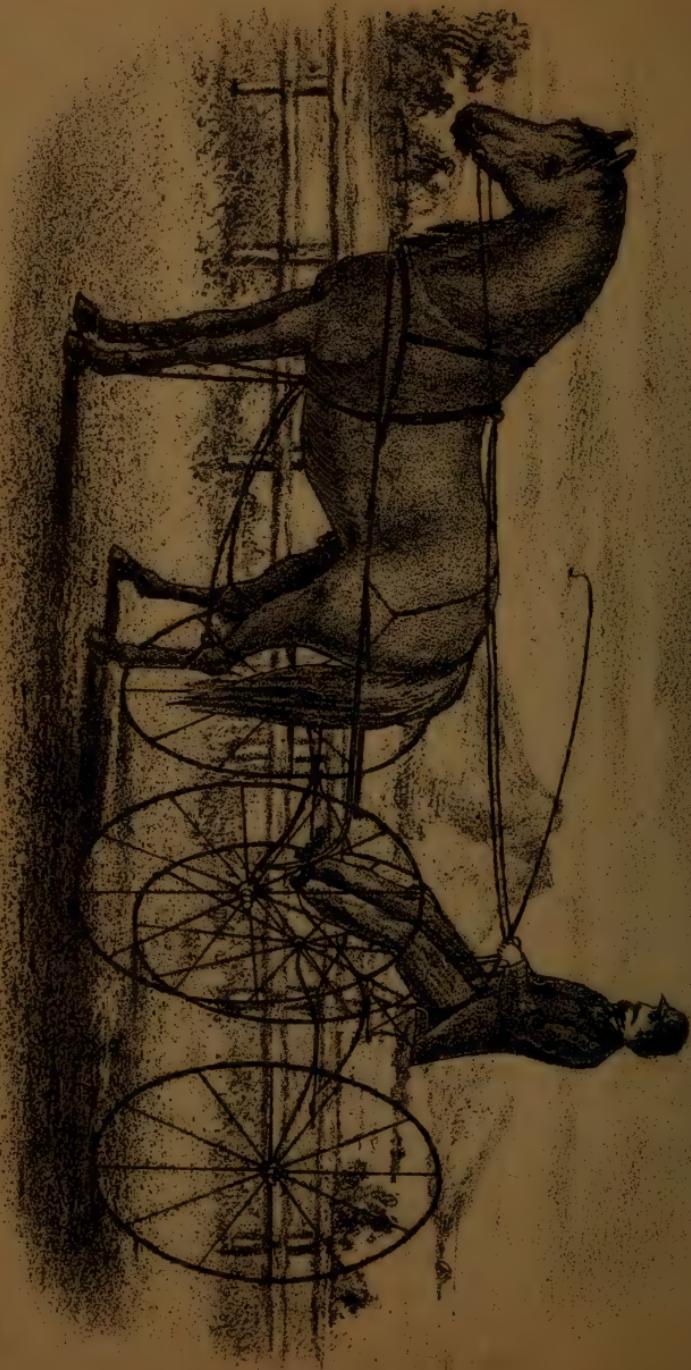
No. 24.

SURE WAY OF MAKING A HORSE BAD TO CATCH.



TO BREAK A HORSE TO TROT WHICH IS A PACER.

No. 25.



No. 26.

TO BREAK SINGLE-FOOTED HORSE TO TROT SQUARE.



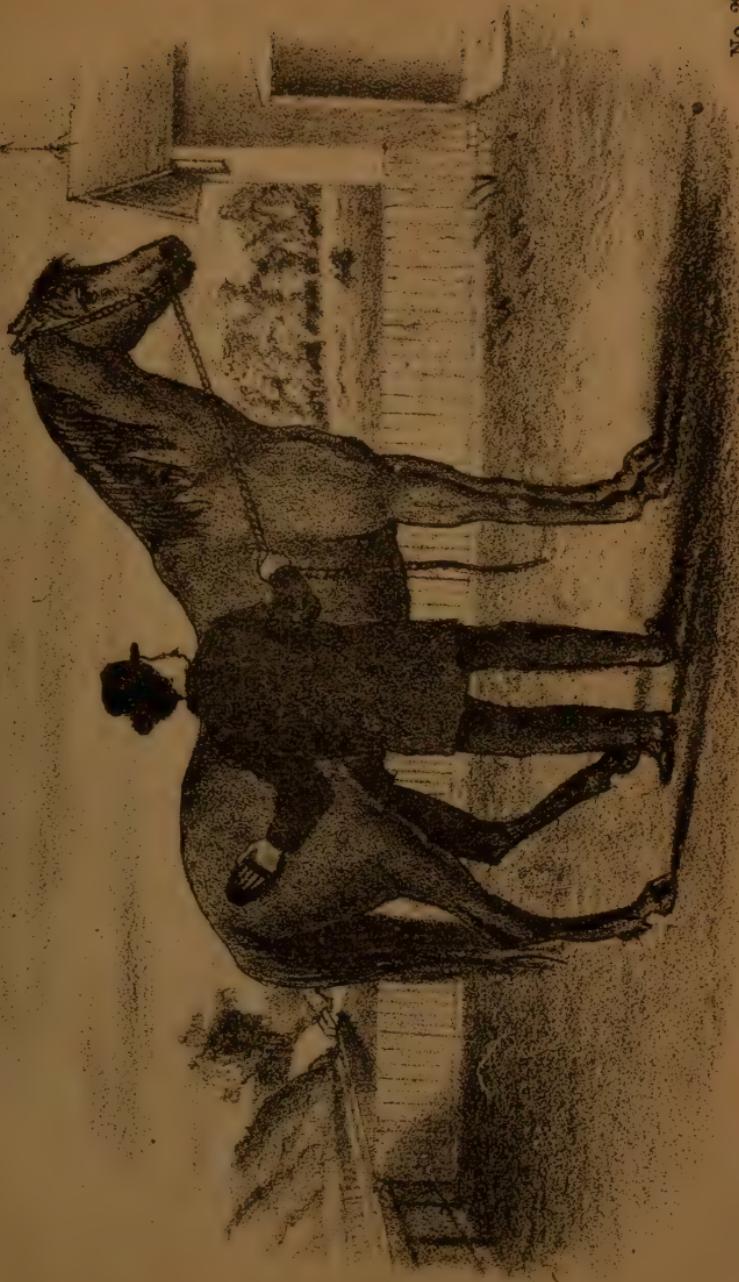
TO BREAK HORSE AFRAID OF UMBRELLA OR BUFFALO ROBE.

No. 27.



No. 28.

HORSE BAD TO GROOM.



same time using the word "whoa." If he remains quiet, caress him, and after a little, by patient and kind words, he will know you do not wish to hurt him, and submit patiently. It may be necessary to use the cord a number of times before a thorough cure is acomplished.

To Break a Horse that Kicks when he gets the Line under his Tail.

(See Engraving No. 29.)

Lay the horse down, and, by applying a rope or strap around the tail (as seen in engraving), working back and forth for a number of lessons, you get the nervousness out, and he cares nothing for the line.

To Break any Horse of Switching his Tail.

(See Engraving No. 30.)

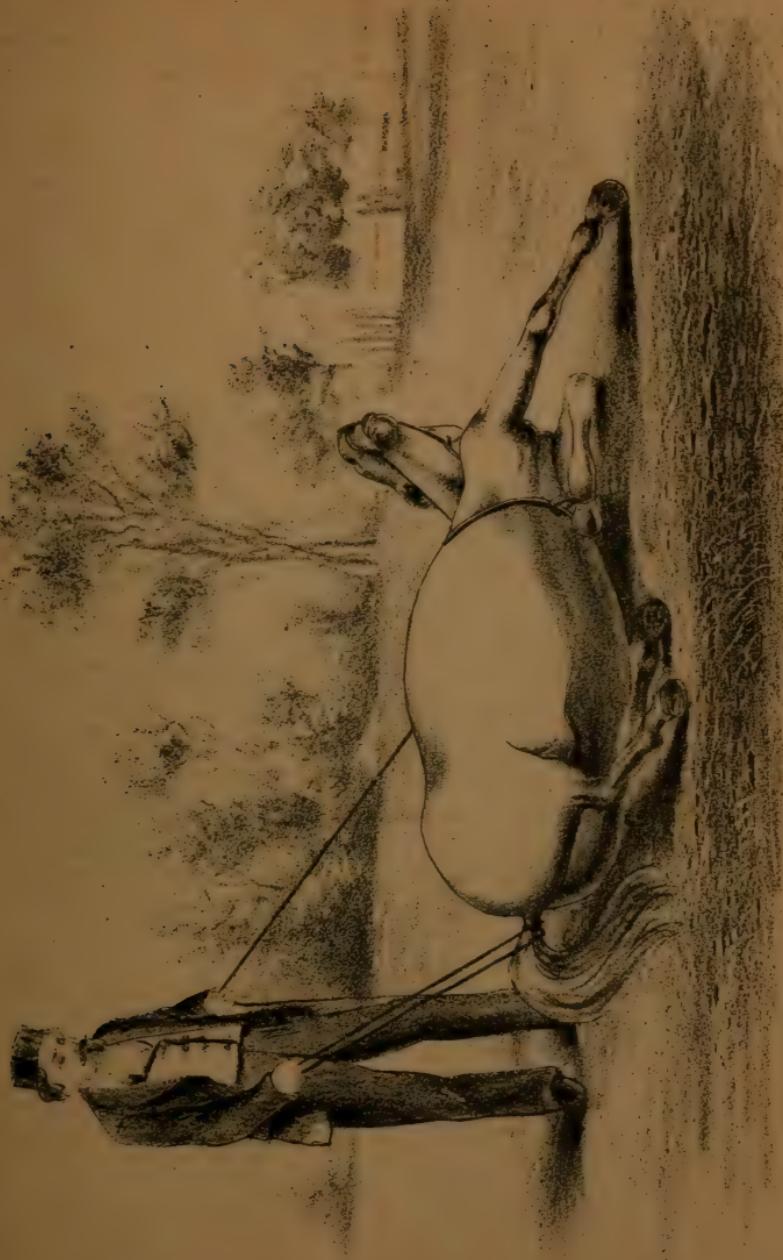
Place on the horse (as seen in the engraving) a collar and hames. Then turn over the tail on the back, fastened with a cord so that it cannot slip, passing the ends down through the lower hame-rings, pulling the tail down on the back, snug and tight, and fastening to the hame-rings. Then place on the horse a common surcingle to hold the cords in their proper places, turning the horse out in a close yard or barn floor, and let him or her kick or do as they please for nine hours or more, according to the strength of cord in the tail; and at the end of that time you may untie the tail, and have no fears of switching any more.

Ladies' Equestrian Horsemanship.

(See Engraving No. 31.)

The saddlery for the use of the ladies is similar in principle to that devoted to gentleman's riding, with the exception that the bits and reins of the bridle are lighter and more ornamental, and the saddle furnished with crutches for side-riding; the reins are narrower than those used by gentlemen, but otherwise the same. The saddle should be carefully fitted to the horse, and there should always be a third crutch, the use of which will hereafter be explained. There is an extra leather girth, which keeps the flaps of the saddle in their

No. 29.
TO BREAK A HORSE THAT KICKS WHEN HE GETS THE LINE UNDER HIS TAIL.





No. 30.

TO BREAK ANY HORSE OF SWITCHING HIS TAIL.

No. 31.

LADIES' EQUESTRIAN HORSEMANSHIP.



places. The stirrup may either be like a man's with a lining of leather or velvet, or it may be a slipper, which is safer, and also easier to the foot. The lady's whip is a light affair, but, as her horse ought seldom to require punishment, it is carried more to threaten than to give punishment. A spur may be added for a lady's use; it is sometimes needful for the purpose of giving a stimulus at the right moment. If used, it is buckled on to the boot, and a small opening is made in the habit, with a string attached to the inside, which is then tied around the ankle, and thus keeps the spur always projecting beyond the folds of the habit. A nose-martingale is generally added for ornament; but no horse which throws his head up is fit for a lady's use. The lady's horse ought to be a most perfect goer, instead of being, as it often is, a stupid brute, fit only for a dray.

Many men think that any horse gifted with a neat outline will carry a lady; but it is a great mistake; and if the ladies themselves had the choice of horses, they would soon decide to the contrary. The only thing in their favor, in choosing a lady's horse, is that the weight to be carried is generally light, and therefore a horse calculated to carry them is seldom fit to mount a man, because the weight of the male sex is generally so much above that of an equestrian lady. Few of this sex who ride are above one hundred and thirty pounds, and most are below that weight. But in point of soundness, action, mouth and temper, the lady's horse should be unimpeachable. A gentleman's horse may be good yet wholly unable to canter, and so formed that he cannot be taught; he, therefore, is unsuited to a lady; but on the other hand, every lady's horse should do all his paces well. Many ladies, it is true, never trot; but they should not be furnished with the excuse that they cannot because their horses will not. In size, the lady's horse should be about fifteen hands or from fourteen and a half to fifteen and a half; less than this allows the habit to trail in the dirt, and more, makes the horse too lofty and unwieldy for a lady's use. In breaking the lady's horse, if he is of good temper and fine mouth, little need be done to make him canter easily, and with the right leg foremost. This is necessary, because the other leg is uncomfortable to the rider from her side position on the saddle; the breaker, therefore, should adopt the means elsewhere described, and persevere until the horse is quite accustomed to the pace, and habitually starts off with the right leg. He should also

bend him thoroughly, so as to make him canter well on his hind legs, and not with the disturbed action which one so often sees. The curb must be used for this purpose, but without bearing too strongly upon it; the horse must be brought to his paces by fine handling rather than by force, and by occasional pressure, which he will yield to and play with if allowed, rather than by a dead pull. In this way, by taking advantage of every inch yielded, and yet not going too far, the head is gradually brought in and the hind legs as gradually are thrust forward, so as instinctively to steady the mouth and prevent the pressure which is feared. When this "sitting on the haunches" is accomplished, a horse-cloth may be strapped on the near side of the saddle, to accustom him to the flapping of the habit; but I have always found, in an ordinarily good-tempered horse, that if the paces and mouth were all perfect, the habit is sure to be borne.

It is a kind of excuse which gentlemen are too apt to make, that their horses have never carried a lady; but if they will carry a gentleman quietly, they will always carry a lady in the same style, though they may not perhaps be suitable to her seat or hand. The directions for holding the reins, and for their use, elsewhere given, apply equally well to ladies; the only difference being that the knee prevents the hand being lowered to the pommel of the saddle. This is one reason why the neck requires to be more bent for the gentleman's use, because, if it is straight, or at all ewe-necked, the hands being high raise the head into the air, and make the horse more of a "star gazer" than he otherwise would be. Many ladies hold the reins as in driving. It is in some respects better, because it allows the hand to be lower than the gentleman's mode, and the ends of the reins fall better over the habit. In mounting, the horse is held steadily, as for a gentleman's use, taking care to keep him well up to the place where the lady stands, from which he is very apt to slide away. The gentleman assistant then places his right hand on his right knee, or a little below it, and receives the lady's left foot. Previously to this she should have taken the rein in her right hand, which is placed on the middle crutch; then with her left on the gentleman's shoulder, and her foot in his hand, she makes a spring from the ground, and immediately stiffens her left leg, using his hand, steadied by his knee, as a second foundation for a spring; and then she is easily lifted

to her seat by the hand following and finishing her spring with what little force is required. As she rises, the hand still keeps hold of the crutch, which throws the body sideways on the saddle, and then she lifts her right knee over the middle crutch. After this, she lifts herself up from the saddle, and the gentleman draws her habit from under her until smooth; he then places her left foot in the stirrup, including with it a fold of her habit, and she is firmly seated, and should take her reins, and use them as directed for the gentleman. The great mistake which is constantly made in mounting is in the use of the lady's knee, which should be carefully straightened the moment it can be effected; for if kept bent it requires a great power to lift a lady into the saddle, whereas, with a good spring and a straight knee, she ought to weigh but a few pounds in the hand.

The lady's seat is very commonly supposed to be a weak one, and to depend entirely upon balance, but this is the greatest possible mistake; and there can be no doubt from what is seen in private, as well as in the circus, that it requires as great an effort of the horse to dislodge a good female rider, as to produce the same effect upon a gentleman. Even with the old single crutch, there was a good hold with the leg, but now that the third is added, the grip is really a firm one. When this is not used, the crutch is laid hold of by the right leg, and pinched between the calf of the leg and the thigh, so as to afford a firm and steady hold for the whole body, especially when aided by the stirrups. But this latter support merely preserves the balance, and is useful also in trotting; it does not at all give a firm, steady seat, though it adds to one already obtained by the knee. When two crutches are used, the leg is brought back so far as to grasp the crutch as before, but between the two knees the two crutches are firmly laid hold of, the upper one being under the right knee, and the lower one above the left. The right knee hooked over the crutch keeps the body from slipping backwards, whilst the left keeps it from a forward motion, and thus the proper position is maintained. In all cases the right foot should be kept back, and the point of the toe should scarcely be visible. These points should be carefully kept in view by all lady riders, and they should learn as soon as possible to steady themselves by this grasp of the crutches without reference to the stirrup-iron. In spite of her side-seat, the body should be square to the front, with the elbow easily bent and preserved in its proper position by the same precaution. The whip is

generally held in the right hand, with the lash pointing forward, and towards the left, and by this position it may be used on any part of the horse's body by reaching over to the left and cutting before or behind the saddle, or with great ease on the right side. Its use may, therefore, in all cases be substituted for the pressure of the leg in the description of the modes of effecting the change of leg, turning to the left or right, or leading with either leg. With this substitution, and with the caution against all violent attempts at coercion, which are better carried out by the fine hand and delicate tact of the lady, all the feats which man can perform may well be imitated by her. In dismounting, the horse is brought to a dead stop, and his head held by an assistant; the lady then turns her knee back again from the position between the outside crutch, takes her foot out of the stirrup, and sits completely sideways; she then puts her left hand on the gentleman's shoulder, who places his right arm around her waist, and lightly assists her to the ground.

To Cure a Cow of Kicking while being Milked.

(See Engraving No. 32.)

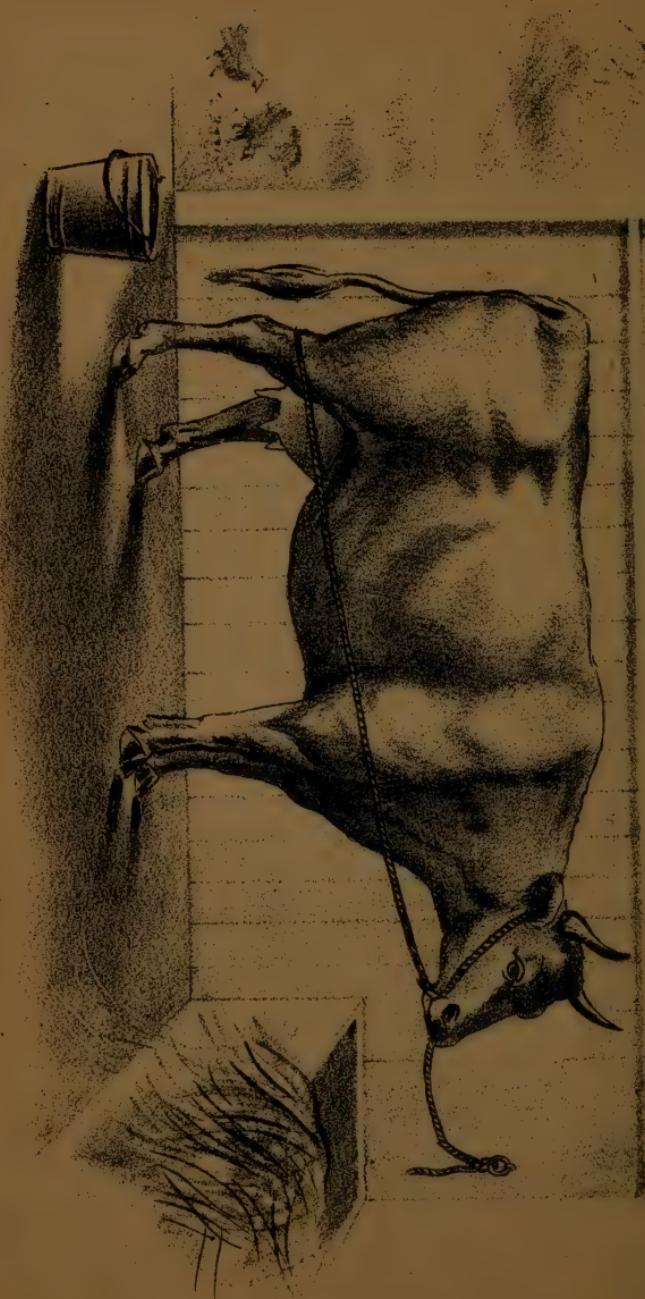
First tie secure to a post or in the stable. Then place on the cow a Bonaparte bridle (as seen in the engraving), passing the rope around one leg, and tying to the other, on the side which you sit down to milk at; then take a pole and touch your cow lightly, making her kick a few times, which will punish her in the mouth; and, after a few lessons of this kind, it never fails to radically cure them. In breaking young cows, use them gently, never using harsh language or a loud voice; and only in willful, stubborn cows will it be necessary to use the cord, and even then only use with the hand. Punish them when they do wrong, and caress them gently when they do right.

To Lead a Cow or Steer behind a Wagon.

(See Engraving No. 33.)

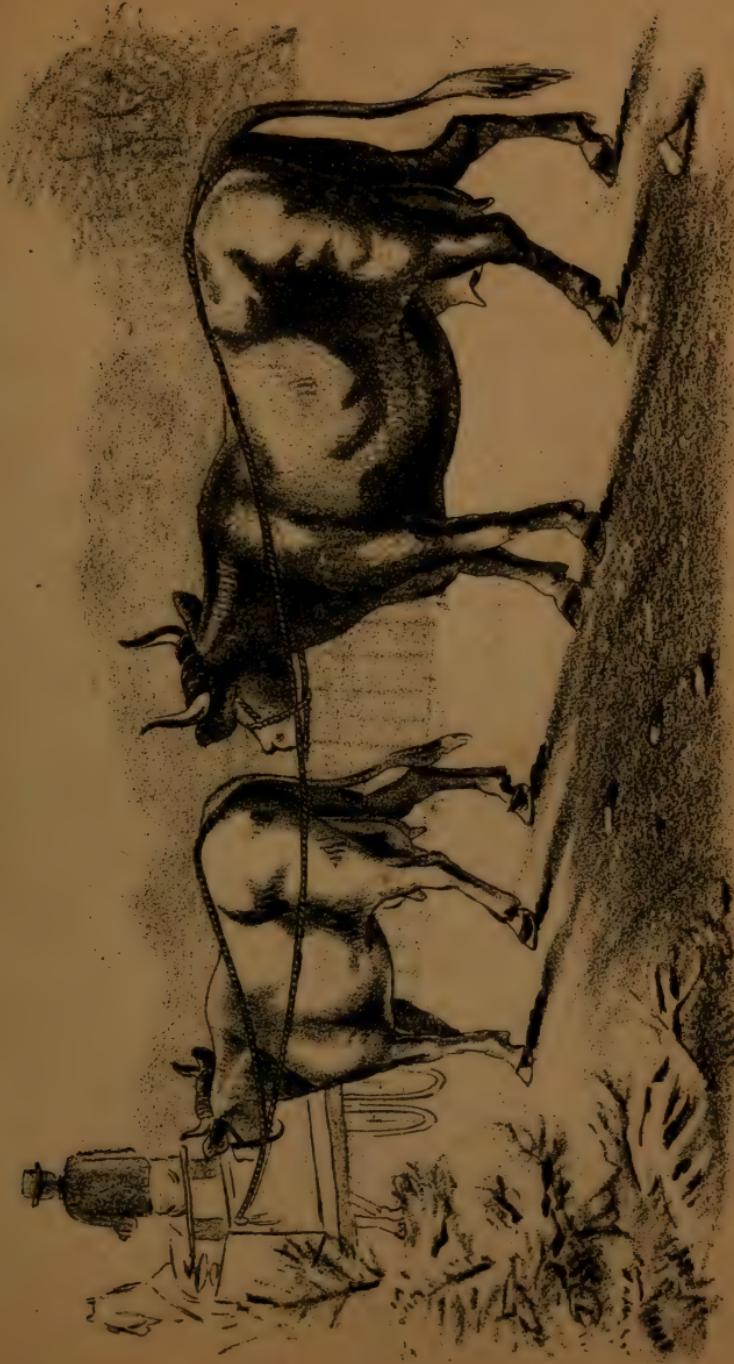
Place on the cow a Bonaparte bridle, and give them a jerk to the right or left a few times; then place on them a rope halter; then take a small strong cord, eighteen or twenty feet long, divide in the middle, and place under the tail; bring each end through the halter and tie to the wagon, get in and go along, and when you get home you will find the cow where you hitched her.

TO CURE A COW OF KICKING WHILE BEING MILKED.



No. 32.

No. 33.



TO LEAD A COW OR STEER BEHIND A WAGON.

To Make a Cow Let Down her Milk.

(See Engraving No. 34.)

Practical Result of Making a Cow Let Down her Milk.

(See Engraving No. 35.)

To procure the above results, it will be necessary to use from fifty to sixty pounds weight.

Horse Bad to Shoe.

(See Engraving No. 36.)

The habit of resistance to being shod, or allowing the feet to be handled, like all others to which horses are subject, is the result of hasty and imprudent harshness. It would seem, from the reckless disregard of consequences so generally evinced in handling young horses, as though man doubted his own reason, and would not take counsel of the teachings of prudence. If the feet had been handled gently at first, and blacksmiths had not vented so much of their vexation in the way of pounding with the hammer for every little movement of resistance in shoeing, this habit would never have been contracted. The natural tractability of the horse causes him to yield a ready obedience to all reasonable demands that he comprehends. If the feet are jerked up roughly, and without an effort to reconcile him to being handled, the colt will strive to get away or free himself from what he supposes will hurt him. Never hold to the foot with all your might when the colt is trying to jerk it away, for in such a case strength is not your forte, and your struggles only convince the horse of your weakness. Handle the horse in conformity with the laws of his nature, so as not to excite resistance through fear of injury. If the horse does not very much resist the handling of his feet, put the Camanche bridle on him and put a short strap on his hind foot. Pulling upon the strap will bring the foot forward, and he will probably resist by kicking. The instant he kicks, reprove with the Camanche bridle, which is held in the other hand, and so continue until the foot is submitted without resistance. But if your subject is very bad, take a strap or rope about twelve feet long, and tie one end of it in a loop around his neck where the collar rests; pass

No. 84.



TO MAKE A COW LET DOWN HER MILK.

PRACTICAL RESULT OF MAKING A COW LET DOWN HER MILK.

No. 35.



No. 36.



HORSE BAD TO SHOE.

the other end back between the fore legs and around the near hind leg below the fetlock; thence back between the legs and through the loop around the neck. Now step in front of the horse and take a firm hold of the rope or strap, and give a quick pull upon it, which will bring the foot forward. If the horse is bad, pull the foot as far forward as you can, which will give you the more advantage. The horse will try to free the foot by kicking. Hold the head firmly with the left hand, and with the other hold the strap firmly. Stand right up to the horse's shoulder and whirl him about you, which you can easily do while he struggles to free himself. As soon as he yields, handle the foot gently, and then let up on it a little, and so continue until he will let you handle the foot without resistance. It may be necessary to repeat the lesson once or twice, and be careful to handle the foot with the greatest gentleness.

If your rope is rough, put a collar on the neck instead of the loop, and fasten your strap to it. Use a smooth, soft strap, so as not to chafe the foot where it passes around it.

Shoeing.

If we examine the horse's foot while in the natural state it will be found to be almost round and very elastic at the heel, the frog broad, plump, and of a soft, yielding character; the commissures open and well defined, the sole concave; the outside crust from the heel to the toe increased from a slight bevel to an angle of forty-five degrees; consequently, as the foot grows it becomes wider and longer in proportion to the amount of horn secreted, and narrower and shorter in proportion to the ground surface. If a shoe were fitted nicely and accurately to the foot after being dressed down well, it would be found too narrow and short for the same foot after a lapse of a few weeks. Now, if an unyielding shoe of iron is nailed firmly to this naturally enlarging and elastic hoof, it prevents its natural freedom of expansion almost wholly, and does not allow the foot to grow wider at the quarters as it grows down, in proportion to the amount of horn grown, as before shod; consequently, the foot is changed by the continued restraint of the shoe from a nearly round, healthy foot to a contracted and unhealthy condition, as generally seen in horses shod for a few years.

The principles which should govern in shoeing are few and simple, and it is surprising, considering the serious consequences involved,

that it should be done with so little consideration. The object of the shoer should be, in trimming and preparing the hoof for the shoe, to keep the foot natural, and this involves, first, the cutting away of any undue accumulation of horn, affecting in the least its health and freedom; second, to carry out in the shape of the shoe that of the foot as nearly as possible; third, to fit and fasten the shoe to the foot so as least to interfere with its health, growth and elasticity. The preparation of the foot requires the cutting away of about the proportion of horn which, coming in contact with the ground, would have worn off, or which has accumulated since being shod last. If the shoes have been on a month, the proportion of horn that was secreted in that time is to be removed. If two months, then the proportion of two months' growth. No definite rule can be given; the judgment must be governed by the circumstances of the case. The stronger and more rapid the growth of the foot, the more must be cut away; and the weaker and less horn produced the less to the extremity of simply leveling the crust a little, the better to conform to the shoe. There is generally a far more rapid growth of horn at the toe than at the heels or the quarters; more will be required to be taken off there than off the other parts. Therefore, shorten the toe and lower the heels until you succeed in bringing down the bearing surface of the hoof upon the shoe to almost a level with the live horn of the sole. Be careful to make the heels level. Having lowered the crust to the necessary extent with the buttress or knife, smooth it down level with the rasp. The sole and frog detach by exfoliation as it becomes superabundant. The sole, therefore, would not need paring were it not for the restraining effect of the shoe upon the general functions of the foot, which is liable to prevent such detachment of the horn. We would be particular, also, in impressing the necessity of not confounding the bars with the substance of the sole, and setting them down to the common level with the sole. Any man of common sense can see that the bearing of the bars should be equal to the outside of the crust upon the shoe, and that they offer a decided resistance to the contraction of the heels. The cutting away of the bars to give the heels an open appearance is inexcusable, and should never be done. In a natural, healthy condition, the frog has a line of bearing with the hoof, and, by its elastic nature, acts as a safeguard to the delicate machinery of the foot immediately over it, and helps to preserve the foot in its natural state

by keeping the heels spread. It seems to be wisely intended to give life and health to the foot. Permitting the heels to grow down, with the addition of high-heeled shoes, raises the frog from its natural position and causes it to shrink and harden, and bears, in consequence, an important influence in setting up a diseased action that usually results in contraction of the foot. If the heels are square and high, and the hoof presents rather a long, narrow appearance, and is hollow on the bottom, there is a state of contraction going on, and you must not hesitate to dress down thoroughly. Do not hesitate because the foot will appear small. Cut away until you are well down to a level with the line horn of the sole, and, if the foot is weak, use the same prudence in not cutting it away too much. The shoer must always bear in mind that the sole must not rest on the shoe. Let the foot be so dressed down, and the shoe so approximate, that the bearing will come evenly upon the crust all the way around without the sole touching the shoe. This requires the crust to be dressed level, and, although well down to the live horn of the sole, it should always be left a little higher. The corners between the bars and crust should be well pared out, so that there is no danger of the sole resting upon the shoe. Presuming that we have said enough on the subject of paring, we will now consider

The Shoe.

The main object should be to have the shoe so formed as to size, weight, fitting and fastening as to combine the most advantages of protection and preserve the natural tread of the foot the best. In weight it should be proportioned to the work or employment of the horse. The foot should not be loaded with more iron than is necessary to preserve it. If the hoof is light, the shoe should be light also; but if the horse work principally on the road, his shoes should be rather heavy. In its natural state, the foot has a concave sole surface, which seems to offer the greatest fulcrum of resistance to the horse when traveling. Most of the shoes now in use by intelligent shoers are fashioned on this principle; and, aside from the advantage of lightness and strength, they are considered to be an improvement on the common flat shoe. Geo. H. Dadd, veterinary surgeon, said once on the subject of shoeing: "The action of concave feet may be compared to that of the claws of a cat, or the nails on the fingers and toes of a man. The nails and toes are the fulcrum; they grasp, as it

were, the bodies with which they come in contact, and thus they secure a fulcrum of resistance when traveling or grasping." Now, in order to preserve the natural mechanical action of the horn and sole, the ground surface of the shoe must correspond exactly with the ground surface of the foot; that is to say, the ground surface of the shoe must be leveled cup-fashion; its outer edge being prominent, corresponds to the lower and outer rim of the hoof, while the shoe, being hollow, it resembles the natural concave form of the sole of the foot.

No matter what may be the form of the foot, whether it be high or low heeled, contracted at the heels, lengthened or shortened at the toe, or having a concave or convex sole, it matters not; the ground surface of the shoe must be concave. In every other part of the shoe alterations and deviations from any given rule or form are needed, in consequence of the ever varying form of the foot and the condition of the same, both as regards health and disease, but the sole of the foot, being concave, presents a pattern for the ground surface of the shoe, which the smith, with all his skill, cannot improve on; and, if all such craftsmen were to follow this pattern more closely than they do, there would be fewer accidents in falling, and a less number of lame horses. The shoe should be of equal thickness all the way round, perfectly level on the top side, and concave on the ground surface.

We cannot see the propriety, as given by a standard author, of seating all shoes alike, and of carrying them well back at the heel. Seating appears to be necessary only for the flat-footed horses, or the inside edge of the shoe must be lowered from the possible bearing of the sole, and enough to run the picker around between the shoe and hoof, to remove any gravel or foreign matter that may find a lodgment between them. If there is much space between the shoe and sole, it invites accumulation of gravel and other substances injurious to the foot.

If the seating is carried well back, and the shoe is wide at the heels, instead of bearing on a level surface as they should, come down upon this inclined plane, it tends to crowd them together. If the shoe is not wide in web, and the foot strong and arched, it may be made perfectly level on top. At all events, that portion upon which rests the heel and crust should be level and accurately fitted. The shoe should be continued around toward the heel so far as the crust extends, as large as the full unrasped hoof, but no part must project beyond it,

excepting at the extreme of the heel. The expansion of the heel and growth of the foot requires that the shoe should be long enough and wide enough at the heels to allow for the natural growth of the foot during the time the shoe is expected to remain on the foot; for, as the foot grows, the shoe is drawn forward, until it loses its original proportion, and becomes too short and narrow. The shoe may be a quarter of an inch wider and longer than the extreme bearing of the heels, and the nail holes should be punched coarse and in the centre of the web. In the hind shoe, four in the outside and two or three well forward in the inside toe, as found necessary to retain the shoe.

The manner of fastening the shoe is what really affects the foot, and what requires the most special attention in shoeing; for the foot, being elastic, expands in the same proportion on the rough as on the nicely-fitted shoe. It is the number and position of the nails that really affect the foot. If they are placed well back in the quarters, four on a side, as is common, the crust is held as firmly to this unyielding shoe as if in a vice, which utterly prevents the free action necessary to its health. Inflammation of the sensitive laminæ is produced, which causes contraction and the consequent derangement of the whole foot.

If the free, natural expansion of the foot and the spreading of the quarters in proportion to the growth of the hoof is prevented by the nailing of the shoe, irritation of the fleshy substance between the crust and coffin bone will result, and ultimately create so much diseased action of the parts as to cause contraction and navicular disease. Shoes may be securely fastened without causing such mischief, if the following method of nailing is observed: "Drive four nails on the outside of the foot the same as common, while you drive two or three well forward in the toe of the opposite side, which leaves the inside quarter virtually free and independent of the shoe, for the outside of the foot, being the only part fastened, carries the shoe with it at every expansion, while the inside, being unattached, expands independently of it, and the foot is left as nearly as possible in a state of nature so far as its powers of expansion are concerned. It may be asked, will this style of nailing hold shoes on the feet of horses of all work? We answer, yes; experience has fully demonstrated that seven nails will hold the shoe on ordinary feet for any purpose, if the shoes are properly fitted, for a period of from four to seven weeks, which is as long as shoes should be on without re-setting. If shoes

are made with little clips, to keep them from being shoved back under the foot, they will require less nailing. If seven nails are found to be necessary, have the three on the inside drove in the space of an inch and a quarter, well forward in the toe, though in most cases two will be found sufficient for the purpose. Turn down the clinchers snugly. Nothing should be done for what might be called "fancy." The hoof should never be filed or rasped above the clinches, as the hoof is covered by a peculiar enamel that prevents the too rapid evaporation of moisture from the horn, and ought not to be disturbed. The practice of rasping, filing or sandpapering the hoof to make it look nice, only produces mischief, and should never be allowed. Horses kept for light driving and irregular work—particularly those having rather square, upright heels—should be shod on the one-sided nailing principle, as the feet of such horses are much disposed to contraction. So far as observation and experience teaches us, we find proper attention to paring down the feet and fastening the shoes so as not to interfere with the free expansion of the hoof (as above) will remedy contraction; though attention to growing down the crust, and the use of shoes that are slightly convex or leveled out, so as to have a tendency to spread the heels when the weight of the body is thrown upon the foot, and fastening on the principle of the inside quarter being left free, is regarded as much better: but the blacksmith must be a good workman to fashion and fit a shoe in this way properly. The nails should not be driven higher in the crust than seven-eighths of an inch, and not so deep as to possibly strike through to the quick. If the foot is light, and shows a thin, delicate crust, the nails should be small, and not driven high or deep into the horn. As a rule, the fewer and smaller the nails used—provided they secure the shoe to the foot—the better. Shoes should be re-set as often as once a month, though in some cases they need not require setting so often. It is positively necessary at six, and must not be neglected longer than seven or eight weeks, if you would preserve the natural shape of the foot.

For Interfering.

To prevent interfering, know first what part of the foot hits the opposite ankle. This you can do by wrapping the ankle with a white cloth, which cover with some kind of coloring matter over where the opposite foot hits; then drive the horse until you can discover, by

some of the coloring matter adhering, what portion of the crust hits the ankle. Remove this portion of the crust, and have the shoe set well under the foot, but carefully fitted, so as to support the foot safely, by bearing on the bar and heel. The hoof should be pared lowest on the outside, to turn the ankle, that the other hoof may pass clear. Yet, if the inside sole is not dressed, the rim soon breaks, and the inside is found to be actually lower than the outside. Shoes, to prevent interfering, should be light, of narrow web on the inside, with three nail-holes near the toe. They should be straight at the point where they come in contact with the opposite ankle. By adhering to this principle strictly of paring the foot and fitting and fastening the shoe, you will prevent a recurrence of the difficulty. Shoes, to prevent overreaching, should be long, and for the forward feet heavy, especially at the heels; and for the hind feet light, with heavy toes. The hoof should be well pared at the toe.

Corns.

Corns appear in the angles of the hoof near the heel. They are generally caused by the shoe being worn too long, causing the shell of the hoof to grow over the shoe, which throws the weight upon the sole, or the angles between the bars and crust are not kept properly dressed out—for any accumulation of horn between the bars and crust which would prevent the free elasticity of the sole at the heel must increase the risk of producing corns, by the liability there is of causing the sensitive laminæ beneath the edges of the coffin bone to become bruised, owing to the undue pressure it may be subjected to for want of elasticity in the horny sole. When the sensitive laminæ is thus bruised, the horny substance of which the sole is composed is secreted in less quantities, the blood from the ruptured vessels mingles with the imperfectly secreted matter, and, as the process is going on, it soon makes its appearance on the outside.

To Cure Corns.

Cut the corn well down, but not quite to the quick; fit the shoe so as not to press upon the part; then saturate with fine gum, which is found exuding from trees when cut. Fill the part nicely with tow; then put on the shoe, remembering that the shoe must be so fitted as

not to oblige the part to support but very little, if any, of the weight of the horse. We have had horses troubled with corns treated in this way with very good effect. Horses with corns must be oftener and more carefully shod than those free from them. In shoeing, strive to keep the form of the foot natural. Be positive in the enforcement of this rule; and, lastly, have the shoes re-set at least every six or seven weeks.

To Learn a Horse to appear Intelligent.

As many of our scholars may wish to know how to teach their horses tricks, we will explain how it may be done. Teaching your horse a few tricks serves greatly to keep an interest in him, and makes him appear fearless, intelligent and affectionate. In teaching a horse tricks, it is best to give him one or two lessons daily, of half, or three-quarters of, an hour each.

To Come at the Crack of the Whip, or Word.

Put on the Camanche bridle; stand off a few feet, holding the halter in your left hand and the whip in the right. Crack the whip, and say, "Come here, sir!" He does not know what this means, but you show him by pulling on the halter a little, which he will obey by moving towards you a few steps. This movement you should thank him for by feeding him something that he likes from your hand, and by petting and caressing him upon the head and neck; then repeat in the same way, rewarding him as before, and so continue until he will walk up to you every time you crack the whip, or say, "Come here, sir," which he will soon learn to do. Each time he comes to you talk to him kindly, and do not fail to give him his reward of corn or something he likes. You can now take off the halter and turn him loose, and repeat until he fully comprehends that the way to avoid the whip is to come to you, which, with the encouragement of rewarding him for so doing, will soon inspire him with confidence, and he will come to you and follow like a dog. Be very cautious about the use of the whip or harsh language, remembering that perfect, cheerful obedience is your object, and that can be secured only by great patience and gentleness.

To Make a Bow.

Take a pin in the right hand, between the thumb and forefinger,

and stand at his left side, near the hips; tell him to make a bow. Then prick him very lightly on the small of the back, this will make him move his head; keep pricking him until you get the right motion of the head; then caress him where you have been pricking him; or take your pin, as before, and stand up to his shoulder and prick him on the breast lightly, as if a fly were biting, which, to relieve, he will bring down his head, which you will accept as a bow, and will reward by caressing on the side of the neck. Then repeat until he will bring down his head at the least motion of your hand towards his breast, or any other signal that he will understand readily.

To Say No.

Stand by your horse's shoulder; tell him to shake his head, at the same time prick him lightly on the withers or neck, which will cause him to shake his head as if to drive away a fly. You then caress as before, and repeat until he will shake his head at the least indication of your touching him with the pin; you can train your horse so nicely in this way in a short time as to cause him to make a bow or shake his head by merely turning the hand a little or moving it slightly towards him.

To Lie Down.

To teach a horse to lie down quickly, you must lay him down a few times with the rope and strap, as heretofore described. When down, treat your horse with great attention and kindness. After putting him down a few times in this way he will usually lie down in a short time, by taking up one foot and holding it in your hand, asking him to lie down; he will soon come down. When he will come on his knees by taking his foot in your hand, stoop as if intending to take it up, saying, "Lie down, sir!" Then make him come down by a motion of the hand, and, finally, by simply telling him to lie down.

In teaching a horse to lie down, be gentle, caress and reward him for lying down, and your horse, comprehending what you want, and finding himself paid for compliance, will soon be as anxious to get down for the reward as you are to have him do so.

To Sit Up.

When your horse will lie down readily, you can then learn him to

sit up, like a dog, easily. First, cause him to lie down, having on a common bridle, with the reins over his neck; then step behind him and step firmly on his tail with the right foot, holding the reins in the left hand, while with the right bear down firmly on the hips, thus in position, say, "Get up, sir!" The horse, rising from a recumbent position, first turns on his belly, throws out his forward feet and raises himself on them, springs forward and raises on his hind feet. Now, standing on his tail firmly, and pulling back upon the reins when he attempts to spring forward and up, will prevent his doing so, and you will hold him sitting up. Hold him firmly a few seconds, talking to him kindly, before permitting him to rise on his feet. Repeat a few times, when, instead of springing up, he will sit on his haunches a short time, which you are to accept as complying with your wishes.

Always say "Sit up, sir!" every time, and hold him in the position as long as he will bear, by fondling and talking to him kindly, and your horse will soon learn to sit up for you as long as you please. But if your horse is heavy and strong, it will be necessary to resort to other means to hold him down at first. This you do by putting on his neck a common collar, and causing him to lie down; then fasten a halter-strap to each hind foot, and bring forward through the collar and draw up close, which will bring the hind feet well forward. Then step behind, as before, and when he attempts to rise on his hind feet he will find it impossible to do so, because you hold them forward by those straps. Repeat two or three times, when it will not be necessary to resort to such force.

To Learn a Horse how to Dance.

Put on the Camanche bridle; take hold of the cord some four or five feet from the horse's head, and with a whalebone whip tap him on the shin or ankle until he lifts his foot; then caress him, and do the same with the other; then make him raise first one foot, then the other, and caress; then make him raise them several times, until he moves his whole body by the motion of the whip to the time of music.

To Learn to Waltz.

After he has learned to dance, put a surcingle around his chest and fasten the bridle reins to it—the left ~~rein~~ much the tightest—bringing

his head well round to the left side. Then make him move forward, when he follows his head, and every time as he is turning his head from you give him a sharp cut with the whip, which will make him jump round quickly until his head comes around to you again. Then you should caress and encourage him by talking kindly. He will then be slower to move his head from you, but you must continue with the whip every time the horse's hind parts are to you and his head from you, caressing every few minutes, until he understands to move at the motion of the whip.

To Teach a Horse to Kiss You.

Teach him first to take an apple, or something that he likes, out of your hand; when gradually raising the hand nearer the mouth at each repetition until you require him to take it from your mouth, holding it with your hand, telling him at the same time to kiss you. He will soon learn to reach his nose up to your mouth, first to get his apple, but finally because commanded to do so. Simply repeat until your horse understands and will do the trick thoroughly.

To Shake Hands.

Tie a short strap to the forward foot below the fetlock. Stand directly in front of the horse, holding the end of the strap in your hand, then say, "Shake hands, sir," and immediately pull upon the strap, which will bring his foot forward, and which you are to accept as shaking hands, thanking him for it by caressing and rubbing his leg, and so repeat until when you make the demand he will bring the foot forward in anticipation of having it pulled up. This is a very easy trick to teach a horse. By a little practice, a horse may be easily trained to approach, make a bow, shake hands, follow like a dog, lie down, sit up, etc., which makes him appear both polite and intelligent. Never lose courage or confidence in your ability because you do not bring about good results easily. To accomplish anything of importance, remember, it requires no ordinary resolution and perseverance. There will be no credit or importance attached to mastering and managing bad horses, if not difficult and apparently dangerous. No duty requires more firmness of purpose in the control of the passions, or more fidelity to the principles of kindness and truth, than that of Horsemanship.

The Trick Dog.

(See Engraving No. 37.)

Many amusing tricks may be taught to exhibit the wonderful sagacity of dogs. Perhaps a Spaniel dog is the most tractable of any; but a black-and-tan is quite as apt. A Scotch terrier is also quick to learn.

TO TEACH HIM TO SIT UP.

Sit him up in the corner, and with a switch hit him lightly under the mouth, snapping your fingers, and say, "Sit up." As he comes down, put him back, and repeat, till he will remain. Then say, "That will do," and call him down, and caress him; repeat this, till he will do it in any place as well as in the corner of a room. He will soon learn to do the trick at the word and snap of your fingers.

TO TEACH HIM TO SIT DOWN.

Press your hand upon his back toward his hind legs, and say, "Sit down," at the same time tapping the floor with your foot. Tap him under the chin, to keep his head up. He will, after a few lessons, understand that tapping the floor means sit down.

TO STAND UP.

Take some food in your hand, and offer him, holding it well up, and say, "Stand up." Repeat, till he will stand up readily, permitting him to rest his fore paws on your unoccupied hand, till he can stand easily alone. Then take him by the fore feet, lift him up quite hard, and say, "Stand up." You can now combine this with the last two tricks, saying, "Stand up," "Sit up," "Sit down," "That will do."

TO GET INTO A CHAIR.

(See Engraving No. 38.)

Take your own way to coax him into the chair, using the word *chair* whenever you cause him to get into it. When he becomes familiar with the word, say, "Go and get into the chair." After he will do this, teach him to put his paws on the back, by saying, "Put them up," or saying, "Up!" assisting him at first. Then teach him to put his head down on his paws, by placing it there and repeating the word *down*, caressing him each time he complies. To have him

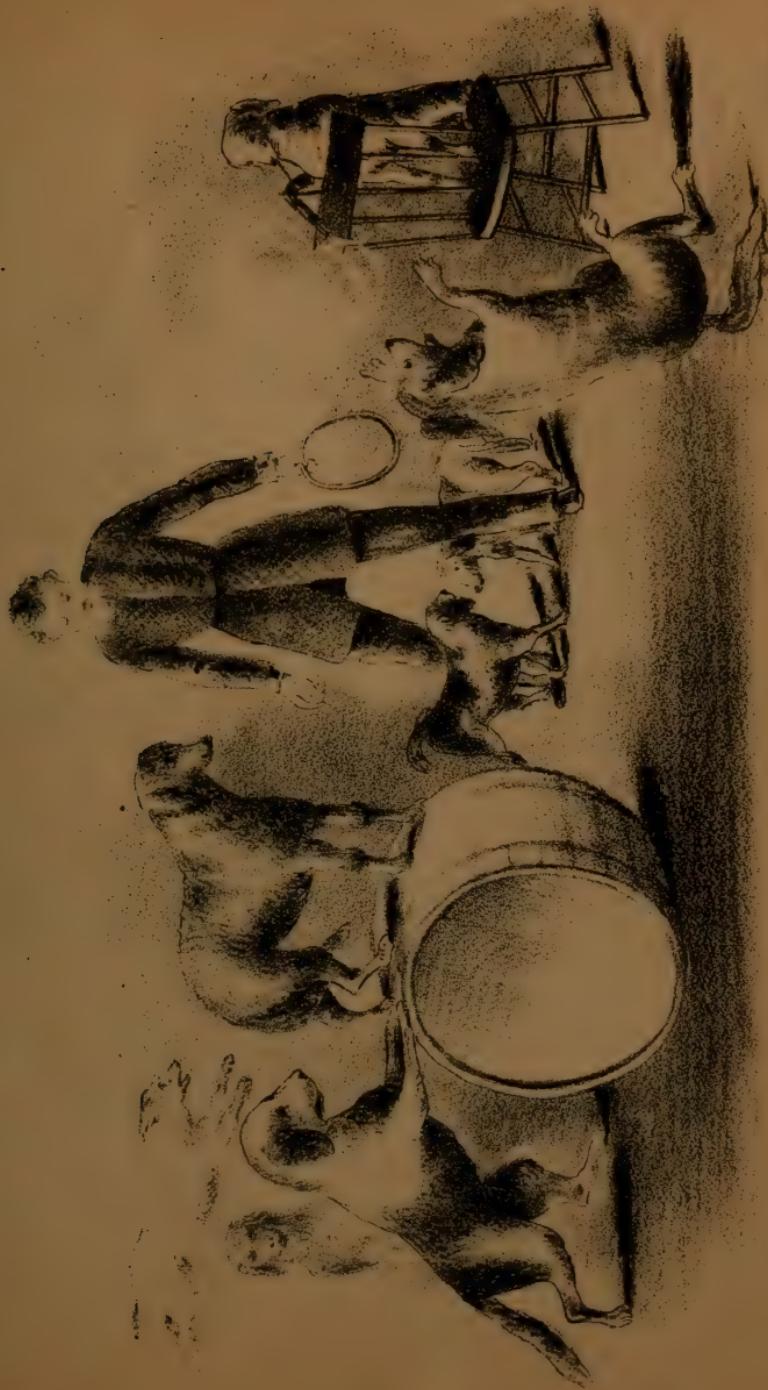
EDUCATING DOGS.



No. 37.

No. 88.

EDUCATING DOGS.



hold his head up, tap him under the mouth, and say, "Up," remembering to say "That will do," when you are through with the trick. You may teach him to jump over the chair, by playfully coaxing him to do so, saying, "Jump."

TO MAKE HIM GO LAME.

Tap him with a little rod on the hind foot, saying, "Lame;" then coax him along, and if he puts his foot down, hit him quite smartly on the foot, making him keep it up, till he will go lame at the word, and a motion of the rod. When you seat him in the chair, if he goes to jump down, stop him; teaching him to wait for the word *ho*. As he comes down with his fore feet on the floor, *steady* him by the word, and teach him to stop with his hind legs up in the chair; lead the way around as far as he can go, and then back again; if this is done on a stool, he can thus be taught to go all the way around, and is then ready to run on his forward legs. Do this as often as the chair trick is performed, saying "Around;" after a while take him by the tail and lift him up, and switching his hind legs lightly, walk him around, saying, "Around." He will soon learn to lift up his hind legs at the motion of the whip, and the words, "Go round," and will perform a circle, walking on his forward legs.

TO SIT ON A STOOL.

It is now easy to teach him to *sit down* on a low stool. You may then teach him to take a seat on the stool, by leading him around by his forward feet, and seating him on the stool, with his fore feet held up, saying, "Seat."

TO TEACH HIM TO FIND THINGS.

Take something with which he is accustomed to play; call him up to you, and blindfold him, throw the article a short distance from you; if the dog has good scent, tell him you have *lost*; then remove the blindfold, and he will search and find it. Repeat this, throwing it farther each time, till you can throw anything you have held in your hand at a distance, you looking in the direction, saying, "I have *lost*;" he will search till he finds it. If the dog has *not* good scent, teach him to look down at the word *find*, and up at the word *up*.

TO TEACH HIM TO CREEP.

First make him lie down on all fours: then get upon your knees, take your dog's fore paws in your hands, and rest the back of your hands on the floor; draw your hands, first one and then the other, toward you, saying, "Creep, creep, sir." If he attempts to get up, hold his fore legs fast to the floor, saying, "Careful, sir." As soon as he stops struggling, begin again. This is one of the easiest tricks for a dog to learn, and can be taught him in a very short time.

TO BE A DEAD DOG.

Take your dog by the fore shoulders, say to him "Be dead," at the same time lay him down on his side. He will at first struggle to get up, but hold him fast, and when he is quiet, take your hands from him. Work slowly and carefully. If he attempts to get up, hold his head to the floor again. In a short time he will lie down upon his side at the word "Dead." When you wish him to get up, change your voice, and speak quickly, but not harshly, "That will do, sir," or "Dinner is ready," or "Beefsteak," or any word you wish, and after he has thoroughly learned the word he will not get up until you speak it.

TO BALANCE ON THE BACK OF A CHAIR.

Take a common bar-room chair—one with wide arms is best; coax your dog up into it; take his fore paws and place them on the arm of the chair; pat and caress him as you proceed. Now get another chair, and place it about a foot from the first; stand on the outside of the chair, and coax him to come to you. They sometimes will jump over the arm; if they do, put them back again and speak out sharply, "Careful." Try him again. He then will probably put all his feet on the arm of the chair. If he does, take the second chair away, and step in front of him as quickly as possible; put your hand under his chin and steady him; gradually take your hand away, and pat and caress him. If you have a small piece of meat to give him, so much the better; but never caress nor feed him unless he does right.

TO TEACH HIM TO WALTZ.

First teach him to stand up. Then take a piece of meat and hold it up above his head. If he jumps for it, take it out of his way, and

give him a slight cuff on the ear. Now say to him, "Stand up." If he obeys you, give him a small piece. Then hold another piece near his nose, and carry it around over his head, saying, "Waltz." If he turns after it, give it to him. Try him so for several times; then make him turn two or three times before you reward him. Work this way for a short time, and he will waltz for you at the word, without any reward.

Diseases of the Dog.

ADMINISTERING MEDICINE.—We will commence this work by giving directions how to administer medicine. If your dog is not large, you can manage him by yourself. Invert a bucket and set on it; set the dog down on his haunches, between your legs, holding him with your knees; tie a cloth around his neck; this, falling over his fore paws is pressed against his ribs by your knees; his fore legs, by this dodge, are "*hors de combat*." With the finger and thumb of one hand force open the jaws, elevating his head at the same time with the same hand. If a bolus, with the other hand pass it over the roots of his tongue, and give it a sharp poke downward; close the mouth, still holding up the head till you see it swallowed. If a draught, give a mouthful, close the mouth, hold up the head, and stop the nostrils. Repeat this if the draught is too large to be taken at once. If the dog is very large you must have an assistant, else in his struggles he will upset you and the medicine too.

PHYSIC.—In giving a dog physic, be sure to keep him warm and dry, especially if you use calomel or mercurial preparations. Always remove him from the kennel and put him into a hospital apart from the rest, to prevent infection, as well as to insure the poor brute quietness. Study the appearance of the eyes, feet, nose, extremities, pulse, etc.

To MAKE A BITCH INCLINED TO COPULATE.—Seven drops tincture of cantharides twice a day till effect is produced; about six days probably.

MANGE.—Caused by dirty kennels, neglect, want of nourishing, or improper, food. Cure—one ounce salts, if dog of moderate size; rub every third day, well into the skin, of the following mixture: train oil

(tanner's will do), one quart; spirits turpentine, one large wine-glass full; sulphur, sufficient to make a thin paste; mix well; let it stay on the animal two weeks, then wash well with castile soap and warm water.

WORMS.—Cowhage, one-half drachm; tin filings (very fine), four drachms; make into four or six balls, according to size of dog; one daily, and a few hours afterwards, a purge of salts or aloes. Another remedy—powdered glass, as much as will lie on a quarter of a dollar, mixed with lard. Repeat once or twice alternate days; finish off with one or two drachms of socotrine aloes rolled up in tissue paper.

TO MAKE A DOG FINE IN HIS COAT.—A table-spoonful of tar and oatmeal; make bolus.

TO DESTROY LICE.—Sometimes the recipe for fleas will prove efficacious, but not always. A small quantity of mercurial ointment, reduced by adding hog's lard to it, say an equal quantity, rubbed along the back never fails; but the greatest care must be taken to keep the animal warm and dry.

DISTEMPER.—Distemper is caused by low keep, neglect, and change of atmosphere. Symptoms of the disease are as follows: Loss of spirit, activity and appetite, drowsiness, dulness of the eyes, lying at length with nose to the ground, coldness of extremities, legs, ears and lips, heat in head and body, running at the nose and eyes, accompanied by sneezing, emaciation and weakness, dragging of hind quarters, flanks drawn in, diarrhoea, and sometimes vomiting. There are several receipts for this, the worst of all diseases. One is better than another, according to the various stages. The first, if taken at an early stage, seldom fails; half an ounce of salts in warm water, when first taken ill; thirty-six hours afterwards, ten grains compound powder of ipecacuanha in warm water. If in two days he is not better, take sixteen grains antimonial powder, made into four boluses, one night and morning for two days. If no improvement is visible, continue these pills, unless diarrhoea comes on, in which case you must use the ipecacuanha day, about with the pills. If the animal is much weakened by this, give him one teaspoonful Huxam's tincture of bark three times a day. James' powder is almost a certain remedy—dose, four grains. In case of fits coming on, destroy the animal. The same may be said of paralysis. If this disease is

taken in its early stages and attended to, and the dog kept warm, there is not much danger, otherwise it is very fatal.

BILIOUS FEVER is caused by want of exercise and too high feeding. Calomel, six or eight grains, or in an obstinate case, turpeth mineral or yellow mercury, six to twelve grains in a bolus.

INFLAMMATION OF THE BOWELS.—Symptoms: dulness of appearance and eyes; loss of appetite; lying on the belly with outstretched legs; pulse much quickened; scratching up the bed into a heap, and pressing the belly on it; desire to swallow stones, coal, or any cold substance not voidable; inclination to hide away. It is very dangerous, and requires active treatment. Bleed most freely until the dog faints away; clap a blister on the pit of the stomach. Give aloes fifteen grains, opium half a grain; repeat dose three times a day. Bleed after twelve hours if the pulse rises again, and continue dosing and bleeding till either the dog or inflammation gives in. No half measures will do in this case. If you get the upper hand there is no trouble; if not it is fatal. Feed low, and attend carefully to prevent relapse.

STAGGERS AND FITS.—This generally happens in warm weather. Throw water on them if convenient; if not, bleed in the neck, if you have lancets; if not, slit the ears with your knife (you can cause them to adhere together again), or run your knife across two or three bars next the teeth. Bitches coming off heat are more subject to this than dogs in good health.

BLEEDING.—You may readily bleed a dog in the jugular vein, by holding up his head, stopping the circulation at the base of the neck. Part the hair, and with the lancet make an incision, taking care not to stick him too deeply. If the animal rejoices in a heavy coat, it may be necessary to shave away the hair. From one to eight ounces are the quantities; use your own judgment.

CANKER IN THE EAR.—Wash well with soap and warm water; fill the ear with finely powdered charcoal or powdered borax. Clean out daily with sponge on stick and warm water, and repeat the dusting till it heals. Another remedy. Oak bark, one pound, chopped fine and well boiled in soft water. When cold, take of the decoction of bark four ounces, sugar of lead, half a drachm, put a tea-spoonful into the ear night and morning, rubbing the root of the ear well to

cause it to get well into the cavities. This is one of the best receipts in this book.

EXTERNAL CANKER OF THE EAR.—Butter of antimony diluted in milk to the thickness of cream, will cure it; or red precipitate, half an ounce with two ounces of hog's lard, mixed well.

FOR A STRAIN.—Use Bertine's liniment, or one ounce of turpentine, half pint old beer, half pint brine, bathe the part and repeat, or sal ammonia, one ounce, vinegar, one pint.

BRUISES OR STRAINS OF LONG STANDING.—Gall and opodeldoc are excellent; shaved camphor, two ounces; spirits of wine, three quarters of a pint; shake well, and cork close, placing it near the fire until the camphor dissolves; then add a bullock's gall; shake well together; apply, rubbing it well into the part affected until it lathers.

DOG POISONED.—Give a tea-cup full of castor oil. After he has vomited well, continue to pour olive oil down his throat and rub his belly.

FLEAS.—Scotch snuff steeped in gin is infallible; but must be used with great care, and not above a tea-spoonful of snuff to a pint of gin—as the cure, if overdone, is a deadly poison.

TORN EARS.—Laudanum and brandy, equal parts, mix well; apply alternately with sweet oil.

SWELLED TEATS.—Make pomade of camphorated spirit of brandy and goose grease; apply two to three times daily.

TO EXTRACT THORNS.—Cobbler's wax bound on the place, or black pitch plaster or a poultice are equally good.

FILMS OVER THE EYES.—Blue-stone or lunar caustic, eight grains; spring water, one ounce. Wash the eyes with it, letting a little pass in. Repeat this daily, and you will soon cure it.

FILMS CAUSED BY THORN WOUNDS.—Rest the dog till perfectly headed over, washing with rose water. If much inflammation, bleed and foment with hot water, with a few drops of laudanum in it—about forty drops of laudanum to one ounce of water; or two grains of opium to one ounce of water—one as good as the other. Then apply four or five times a day the following wash: Super-acetate of lead half a drachm, rose water six ounces.

STRIPPING FEET.—Wash in bran and warm water with a little vinegar; after, apply tincture of myrrh. Apply sweet oil before he goes out. If his feet are sore, wash in buttermilk until better, then apply brine and vinegar equal parts.

WOUNDS.—Poultice for a day or two, then apply Friar's Balsam, covering up the place.

FOR A GREEN WOUND.—Hog's lard, turpentine and beeswax equal parts; verdigris one-fourth part. Simmer over a slow fire till they are well mixed and apply.

PURGATIVE MEDICINES.—Salts, one ounce, calomel, five grains; or socotrine aloes, two drachms for a moderate-sized dog.

TO REDUCE THE TIME A BITCH IS IN HEAT.—Give her a little nitre in water, and a dose of calomel four grains or thereabouts, followed by salts or aloes.

FEED FOR GREYHOUNDS IN TRAINING.—Wheat flour and oat meal, old, equal parts. Liquorice, anise-seed and white of eggs. Make into a paste; make loaves, bake them; break into a very rich broth.

BITE OF SNAKE.—Olive oil well rubbed in before the fire, and a copious drench of it also.

Diseases of the Horse.

INFLAMMATION,

From *inflammo*, I burn, is one of the most common forms of disease presented to the veterinary surgeon, and regarding which many erroneous opinions have prevailed, in consequence of which much injury and often serious consequences have resulted. Sound medical practice must be based upon sound medical principles. A correct understanding of the term inflammation will assist us very materially in understanding the pathology of diseases in their most complicated forms. A few years since every form of disease occurring in our domestic animals was regarded and treated as some form of inflammation; purging and bleeding were the order of the day. How different the practice of the present time.

The manner in which inflammation has been written upon, has

made it a subject perfectly bewildering to the general reader, and, from its being associated with everything in actual practice, no idea of a very definite kind with regard to it will for a long time occur to his mind. With a view to overcome this difficulty, we will give the most simple definition of the term inflammation: "It is an unnatural or perverted action of and in the capillary blood vessels of a part; attended with redness, throbbing, swelling, pain, heat and disorder of function, with change in both its fluid and solid constituents, as well as with more or less general disturbance of the system." The extent to which structures in a state of inflammation will swell, varies considerably, depending upon the vital and physical characters of the tissue involved. Muscular tissue becomes very much swollen, while on the other hand, horny and cartilaginous tissues swell but little, in consequence of their low state of vitality. It must be remembered that it requires an assemblage of the above conditions to constitute inflammation. Swelling, pain, heat or redness alone do not constitute that condition, as either may occur from causes independent of any inflammatory action whatever.

We now feel prepared to proceed with our remarks upon the various diseases with which the horse is afflicted, with a better understanding regarding the interest of our readers than we would have done had we passed this subject by unnoticed.

CAPILLARIES.—The blood is the pabulum from whence is elaborated the entire organism, as well as the source from whence are derived all the various secretions and excretions of the system; but, in order that these purposes may be accomplished, it is necessary for the fluid in question to be circulated through, or its materials brought in contact with every tissue requiring fresh nutrition, as well as through the various secretory and excretory organs. To effectually accomplish this, we find a class of structures set apart and admirably adapted in every way to fulfill the purposes required. The first of these is the heart itself; next comes the large blood conduits, the arteries, which spring from the former, as the tree springs from the earth; while the arteries again terminate in a series of vessels of wonderful minuteness, just as the boughs of a tree terminate in the twigs. These minute vessels are denominated capillaries. These capillaries ramify, and are placed in the most intimate relation with every tissue throughout the body within whose substance reproduction and decay are in perpetual operations, as well as with those organs whose duty

it is to furnish or separate the secretions and excretions already referred to. Each tissue selects from the common pabulum—the blood—thus sent to it, the peculiar principle it requires to support its own life and integrity.

The usual terminations of inflammation are resolution, mortification, suppuration, ulceration, hemorrhage, effusion, hepatization, and ossification. By *resolution* is meant the state of the tissues after their recovery from the effects of inflammation.

MORTIFICATION is loss of vitality, or death of the tissues involved.

SUPPURATION.—A collection of purulent matter, which receives the name of abscess.

ULCERATION.—A purulent solution of continuity of the soft parts arising from loss of substance.

HEMORRHAGE occurs as a direct or indirect consequence of inflammation, from ulceration penetrating through the coats of an artery.

EFFUSION.—An exudation of serum, watery accumulations, as in dropsy.

HEPATIZATION.—Conversion of a texture into a substance like liver.

OSSIFICATION.—Formation of bone—change of soft structures into bony ones.

The account we give is necessarily brief; but we trust it is sufficient to furnish the reader with a clear conception of the matter in hand, and in turn enable him to clearly comprehend that which is to follow.

DISEASES OF THE MOUTH — LAMPASS.

All young animals, during the period of dentition, have a fullness or swelling of the gums and bars, or roof of the mouth. In many colts it occasions but little or no inconvenience, while in others the pain is so great as to interfere with their feeding. When this condition exists, do not resort to the barbarous practice of burning with a red-hot iron, but act humanely. Lance the bars with your pocket-knife, if you have nothing better, as your family physician would lance the gums of your child under similar circumstances, and in a few days the animal will feed as usual.

BAGS, OR WASHERS.

These are soft, puffy swellings of the lining membrane of the mouth, caused by the bit bruising the parts in reining. If inconvenient to the animal, they may be removed by cutting off a portion of the swollen parts with a pair of scissors or a knife, after which apply a little alum-water, or equal parts of tincture of myrrh and water, to the wound, two or three times a day.

SORE MOUTH.

This occurs from the same causes, and is situated usually at the angles of the mouth. Equal parts of tincture of myrrh, tincture of aloes and water, is the best application we can make.

UNEVEN TEETH.

The molar teeth of the horse very frequently become sharp and irregular, interfering with mastication to such an extent as to cause the digestive organs to become impaired, giving rise to an unhealthy condition of the system. At times the insides of the cheeks become lacerated by their sharp edges, causing them to become tumid and sore. These cases can only be remedied by the use of the horse-rasp, an instrument made for the purpose.

WOLF TEETH.

These are two small teeth which make their appearance immediately in front of the upper molar teeth in all colts at some period from the first to the fifth year. It is supposed by very many horsemen that they exert an evil influence over the eyes of the horse. My experience does not prove the fact, and I cannot reconcile my mind to believe that they, natural teeth, should be placed in the mouths of all colts if they were injurious to the eyes or any other organ of the body. If you wish them removed, the best plan is to extract them with a pair of dentist's forceps. In knocking them out, the roots are frequently left behind, and of course your object is not accomplished.

CARIES OF THE TEETH.

Caries, or decay of the teeth of horses, is a disease of frequent occurrence. The silence of veterinary writers upon the subject has

caused it to be overlooked by those having the care of that useful animal, and the symptoms in consequence have been confounded with those of other diseases.

SYMPTOMS.—Occasionally we have a fetid breath, fetid discharge from one nostril, a wheezing in the head, food improperly masticated passing away undigested, quidding, drowsing, hide-bound, staring coat, tucked-up belly, tossing the head, stopping short on the road, shaking his head and starting on again, and at times becoming almost unmanageable. These symptoms do not all occur in the same animal—one appearing drowsy, requiring the whip to urge him on, while another, at times, is wild and frantic with pain, taking the bit, and becoming troublesome to manage, occasionally running away. Some of these symptoms occur in other diseases; but we should not overlook the teeth in our examination when any of the above symptoms appear. The only remedy is the extraction of the diseased teeth.

DISTEMPER.

All catarrhal affections are classed under one general head, namely, distemper, by horse-owners generally. A common cold, sore throat, influenza, bronchitis, and several others, are regarded as distempers. We will endeavor to make the distinction in such a manner that each form of disease may be readily discovered, and the proper remedies applied. Distemper, as we should understand it, is the mildest form of catarrhal affections. A common cold, for instance, is an inflammation of the lining membrane of the nose, causing a secretion of mucus, which is more or less abundantly discharged from the nostrils, in severe cases the inflammation extending down the trachea, or windpipe, to the bronchial tubes, and sometimes to the lungs, producing diseases which are classed under different heads, and often requiring different treatment.

TREATMENT.—Oil of origanum, 1 ounce; oil cedar, 1 ounce; tincture cantharides, 1 ounce; olive oil, 4 ounces; shake well, and bathe the throat and glands morning and evening for six days; rub in well with the hand; he will throw out freely, and the cure is performed.

SORE THROAT.

This is usually one of the first indications of catarrh, and when confined to that portion of the throat at the angle of the jaws it is

termed laryngitis. The symptoms of this disease are well marked: the head is stiff, and if the throat is rubbed or pressed upon, coughing is excited; the animal manifests difficulty in swallowing, and frequently considerable saliva collects in the mouth.

TREATMENT.—Apply strong mustard made into a paste with vinegar to the throat, and rub it well in; or linseed oil, two parts, with spirits of hartshorn; one part will answer a good purpose. Give upon the tongue half a tea-spoonful of powdered saltpetre twice a day.

STRANGLES.

This is a more severe form of laryngitis, involving the glands of the throat, causing a very great swelling, which often threatens suffocation. The respiration becomes disturbed, the breathing laborious, and can be heard at a considerable distance; the animal sweats from his convulsive efforts to breathe, and, if not relieved, dies a violent death. Here the aid of the qualified veterinary surgeon is absolutely required, as there are few persons competent to perform the operation of tracheotomy; that is, opening the windpipe to admit air into the lungs. This, early performed, frequently saves the animal's life.

TREATMENT.—Poultice the throat well with flaxseed meal; steam the nostrils two or three times a day, and, as soon as the swelling under the jaws becomes soft, it should be lanced. When relief is once obtained, the further treatment of these cases is the same as for ordinary sore throat.

INFLUENZA.

Spring and fall are the seasons most productive of epidemic catarrh. One year it assumes a mild form; the next, perhaps a most malignant one. Influenza is known to horsemen under the common name of "pink-eye distemper."

SYMPTOMS.—These vary very considerably in different animals. The usual or leading symptoms are: slight watery or thin mucus discharges from the nose, eyelids presenting a reddish or orange-red appearance, matter collects in the corners of the eyes, pulse feeble, great debility, as shown by the quick, feeble action of the heart—a symptom rarely absent—membrane of nose much reddened, sore throat and cough; occasionally the feet become fevered, as in foun-

der, causing much stiffness, which may be easily mistaken for that disease.

TREATMENT.—This being a typhoid disease, requires a sustaining treatment, or our success will be very doubtful. In the early stage of the disease give, the first two days, ten drops of tincture of aconite, or bryonia, in a little water, every six hours; after which give in a pail of water, to drink once a day, one ounce of spirits of nitre, or two drachms of extract of belladonna; and give in the feed, three times a day, one of the following powders: Gentian root, saltpetre and anise seed, of each one ounce—sulphate of quinine, one drachm; mix and divide into eight powders; or, powdered cinchonia and powdered quassia, of each, two ounces; powdered anise seed, one ounce; mix and divide into four powders. The throat should be bathed in mustard and vinegar, or with linseed oil, three ounces, spirits of hartshorn one ounce, mixed together. No hay or corn should be given, but scalded oats and wheat bran, with linseed tea or oatmeal gruel, should constitute the diet; a few carrots would be very good, and, above all, good nursing is very desirable.

BRONCHITIS.

This is an inflammation of the bronchial tubes, as its name implies, the air tubes of the lungs. It is usually preceded by a shivering fit, the mouth is hot and full of saliva, the throat is sore, and, if pressed upon, excites a painful cough, discharge from the nose, appetite lost, pulse quick, and respiration labored, eyelids and nostrils reddened; on applying the ear to the side, a gurgling sound is heard.

TREATMENT.—Give the following ball in the early stage of the disease: Nitrate of potassa, pulverized digitalis and tartrate of antimony, of each half a drachm, molasses sufficient to make the ball. If the fever is not broken in twelve hours, repeat the ball. As soon as the desired object is obtained, give one of the following powders twice a day, in a sloppy mass: nitrate of potassa, one and a half ounces; nitrate of soda, six ounces; divide into six powders; or give the following: Extract of belladonna, one drachm; spirits of nitre, one ounce; solution of acetate of ammonia, four ounces, in half a pint of water, as a drench. The throat and sides should be blistered; the ordinary fly blister, made thin with turpentine, is very good, or mustard mixed with equal parts of water and spirits of hartshorn.

Either of the above, when used, should be well rubbed in with the hand.

NASAL GLEET.

This is a chronic discharge, from one or both nostrils, of a whitish muco-purulent matter, the result usually of neglected catarrh. The general health of the animal does not seem to suffer; he looks well, feeds well, and works well; yet we have this discharge, which is caused by weakness in the secretory vessels of the lining membrane of the nose. The successful treatment in all cases where this disorder has existed has been on the tonic principle; bleeding and purging are positively injurious. Give one of the following powders night and morning: Sesqui-chloride of iron, two ounces; powdered cinnamon, one ounce; mix and divide into four powders; or carbonate of iron, pulverized gentian and pulverized quassia, of each one ounce; divide into four powders; or nux vomica pulverized, one-half ounce, linseed meal, two ounces; divide into eight powders. Another good preparation is muriate of barytes, one-half ounce; linseed meal, one ounce; divide into eight powders.

PNEUMONIA.

This disease is known to horsemen as lung fever. It is either inflammatory or congestive, arising from various causes—as high feeding, badly-ventilated stables, violent exercise, or sudden changes from heat to cold. In the congestive stage there is no pulse to be found, and, on applying the ear to the side, no sound is heard; cold sweats bedew the body, the respiration is labored, eyes wild in their expression, legs cold, the animal appears dull and stupid, and is with difficulty made to move; he does not lie down. In these cases medicines are not required; in fact they often do more injury than good; the free and speedy use of the lancet is our only hope, and a pure air is of the greatest importance. A pail of cold water should be placed before the animal, but no food should be given until the animal is relieved, and then only mashes of wheat bran. Under this treatment he will speedily recover, or inflammation of the lungs will be established. The pulse now becomes quick, the mouth hot, legs cold, head hanging in or under the manger, appetite lost; on applying the ear to the side, a crepitating or crackling sound is heard; respiration quick. The treatment here must be prompt and energetic;

blisters to the sides, such as previously spoken of, must be used, and give internally two ounces of spirits of nitre in half a pint of water; follow this in two hours with ten drops of tincture of aconite in water, to be given every six hours until relief is obtained; or give instead one of the following powders: Tartrate of antimony, pulverized digitalis, of each, one drachm; nitrate of potassa, one ounce; mix and divide into eight powders; give one every four hours upon the tongue. Injections of soap and water are very useful in these cases. The legs should be hand-rubbed, and stimulated with mustard or cayenne pepper, and then wrapped in woolen bandages; a pure atmosphere and good nursing are very necessary.

PLEURISY.

This is an inflammation of the lining membrane of the chest and covering of the lungs. The symptoms are uneasiness, pawing, looking at the sides, pulse quick, pain, or pressure over the ribs, body hot, lying down, but rising quickly. The same treatment as in inflammation of the lungs is called for; but, under no circumstances, should bleeding be resorted to. These cases are very apt to terminate in hydrothorax, or

DROPSY OF THE CHEST.

SYMPTOMS—Breathing short and quick, legs straggling, pulse small and quick; breast, belly, and sheath swell, and leave the mark of the finger when pressed upon; the animal stands until he dies. The treatment of this disease, as a general thing, is not very satisfactory. The iodide of potassa, in half-drachm doses, three times a day, has proved the most useful medicine in such cases, in connection with setons in the breast and sides.

BROKEN WIND, OR HEAVES.

This disease is well known to horsemen; so we will content ourselves merely by giving the most successful remedies, which, for the most part, are only palliative. Divide half an ounce of pulverized digitalis in twenty parts, and give one part night and morning in the feed, until gone; this will usually allay all signs of the disease in two weeks. Or, take assafœtida, two drachms; camphor, one drachm; mix and give it every other night for a week.

INFLAMMATION OF THE BOWELS.

This disease may appear suddenly, or it may be slow in coming on. The symptoms resemble those of colic, with which disease it is often confounded. The pulse is our certain guide in determining the character of the disease; when that is full and natural, or nearly so there is no inflammation; if full, strong and quick, there is inflammation; other symptoms corresponding, there is no difficulty in determining the case. In colic the symptoms of pain are intermittent; in inflammation of the bowels there are no intermissions. Other symptoms which are present in both diseases are pawing, kicking the belly, rolling and tumbling about, sweating, haggard expression of countenance looking at his sides, etc.; in colic the legs usually are warm; in inflammation of the bowels they are cold.

TREATMENT.—Bleed freely from the neck-vein, and give ten drops tincture of aconite every three hours; apply blankets saturated with hot water to the entire body, and keep it up for two hours; then remove the wet ones and replace them with dry ones, well-secured with a body girth. Injections of tobacco smoke are very useful in these cases, when not convenient, soap and water will answer the purpose. No food of any kind should be given for at least forty-eight hours.

DIAERHCEA:

The cause of this disease is exposure to cold, over-exertion, change of water, over-doses of cathartic medicine, etc.

TREATMENT.—Give one of the following powders every six hours until the bowels are checked; powdered opium, one drachm; powdered catechu, two drachms; prepared chalk, one ounce; mix and divide into four powders.

COLIC.

This disease—known also as gripes, cramp and fret—is either spasmodic or flatulent. Spasmodic colic is a spasmodic contraction of the muscular coats of the intestines, causing griping pains, etc. (see inflammation of bowels). Flatulent colic is an accumulation of gas in the stomach and intestines, generated by fermentation in the stomach, causing swelling of the abdomen, and sometimes rupture of the stomach.

TREATMENT.—For spasmodic colic, give one ounce tincture opium and one ounce of sulphuric ether in half a pint of water; this should be repeated in half an hour if relief is not obtained. Or, give the following: tincture of opium, one ounce; aromatic spirits of ammonia, half an ounce; extract of belladonna, one drachm; water, one pint; mix. In flatulent colic give chlorate of potash, one half ounce; sulphuric ether, one-half ounce; tincture of aloes, three ounces; water, one pint; mix and drench.

WORMS.

Thousands of animals die annually from the ravages of these pests without the true cause being suspected; especially is this the case in the young of the mare, cow, sheep and pig. Many varieties of these parasites belong to our domestic animals which have not been mentioned by veterinary writers; they are found in every tissue of the body, even in the blood. The symptoms of worms have been but very imperfectly described by writers upon the subject. In an experience of many years I have observed the following symptoms, but not all in the same animal. Each variety of worm has its characteristic symptoms, namely: in bots, we rarely have loss of condition, but when the bots become troublesome, colicky pains, gasping, quickened respiration, staring or haggard expression of the eye, with a strong tendency to inflammation of the bowels, will be observed. Bots are rarely troublesome, except when passing away in their regular manner, which occurs from May to August in each year. In most other varieties of worms the symptoms are debility, feebleness, sluggish movements, emaciation, staring coat, hide-bound, and skin covered with scurvy blotches, rigidity of loins, small and feeble but slightly accelerated pulse, respiration slow, tucked-up belly, a peculiar pallid appearance of the lining of the lips (a certain indication), irregular, capricious, but persistent, appetite, badly digested faeces, agitation of heart and tail; and where the fundament worms exist a whitish or yellowish-white substance will be found about the fundament, indicated also by rubbing the tail.

The treatment for worms has been attended with much uncertainty heretofore, and is to the present day, with practitioners generally. Those on which most dependence has been placed are: calomel, one half drachm; tartrate of antimony, one half drachm; linseed meal, one half ounce; mix and give at night. Or, iron filings, two

drachms; common salt, one-half ounce; powdered savin, one drachm; linseed meal one-half ounce; mix and give every night for a week. Or, assafœtida, two drachms; calomel, one and a half drachms; savin, one and a half drachms; oil male fern, thirty drops; linseed meal, two drachms; mix with molasses and give at night. Or calomel, one drachm; powdered wormwood, one ounce; honey sufficient to make the ball; give at night. Follow either of the above with the following ball: barbadoes aloes one ounce; pulverized gentian, two drachms; pulverized ginger, one drachm; water sufficient to make the ball. Another remedy, highly recommended, is the following: Barbadoes aloes, six drachms; male fern, four ounces; spirits turpentine, two ounces; mix and divide into six balls; give one three times a day.

RETENTION OF URINE.

This is known by frequent but unsuccessful efforts to stale. In some animals it arises from a dislike to spatter their legs in voiding the water; hence a horse will frequently retain it in the bladder until the litter is shaken up under him, when he will at once relieve himself. When the result is spasm of the neck of the bladder, an instrument is used called a catheter, made expressly for the purpose; this is passed up the urinary passage to the bladder, when the water will flow freely and give instant relief.

PROFUSE STALING.

The causes of this disease are, the improper use of diuretic medicines, as saltpetre, rosin, etc. Unwholesome food will sometimes produce it. Treatment: Give one of the following balls every night—powdered opium, one-half ounce; powdered kino, one ounce; prepared chalk, one ounce; mix with molasses and make six balls.

STONES IN THE BLADDER.

These may exist a long time in the bladder before any symptoms arise indicating their presence. The first symptoms of stone are, frequent efforts to urinate, voiding small quantities, usually of a thick whitish color; as the stones increase in size, the symptoms become more aggravated, colicky pains are indicated, rendering it difficult to distinguish the difference: the animal paws, kicks at his belly, lies down, rolls, and gets up quickly. In some cases, these

obstructions are dissolved by the administration of muriatic acid, two drachms, in a pail of water once a day. When this fails, an operation for the removal of the stone is the only remedy. This is not, comparatively, a dangerous operation, in the hands of a skillful surgeon.

QUITTER.

This is a formation of puss between the hoof and the soft structures within; a sore at the coronet or upper part of the foot, which at first is a hard, smooth tumor, but soon becomes soft, and breaks, discharging quantities of pus. Treatment: poultice the foot for several days with flax-seed meal. As soon as the hoof becomes soft, cut away all loose portions, but no more, and inject with a syringe, either of the following, once a day: Chloride of zinc, two drachms, dissolved in one pint of water; or sulphate of zinc, one and a half drachms; dissolved in one pint of water; or nitrate of silver, two drachms, in a pint of water; or glycerine may be used with advantage. Before using the wash, have the foot well cleaned with castile soap and water.

THRUSH.

This is a disease of the frog, causing a discharge of matter from its cleft or division, occasionally causing lameness. The treatment is simple and effective: Wash the feet well with soap and water, and sprinkle a small quantity of pulverized sulphate of copper in the cleft, and secure it by pressing a little raw cotton down upon it in such a manner as to keep out the dirt. In two or three days repeat if necessary. It rarely requires a second dressing.

CANKER.

This is a more aggravated form of thrush, often proving very troublesome to manage. It is a continuation of the thrush between the horny frog and the internal structures of the foot, causing separation between them. Treatment: Cut away all the horn which has been separated from the soft structures of the foot, and apply the following ointment: Take equal parts of pine tar and lard, melt over a slow fire, and add sulphuric acid very slowly until ebullition ceases; or use collodion, half an ounce; castor oil, one ounce; mix and apply to the parts. The foot must be protected from dirt by a bandage or a leather boot.

SCRATCHES.

This disease is well known to all horsemen. Treatment: Wash the parts well with castile soap and water, and when dry apply once a day the collodion and castor oil, recommended in canker; or use a saturated solution of the bichloride of mercury once a week, but not oftener, or mischief may arise in consequence of a too free use.

GREASE HEELS.

This is a white, offensive, greasy discharge from the heels of the horse. The skin becomes hot, tender and swollen; the acrid character of the discharge often causes large portions of the skin to slough away, leaving an ugly sore behind. Treatment: Open the bowels with the following ball: Barbadoes aloes, one oz.; pulverized gentian root, two drs.; pulverized ginger one dr.; water sufficient to make the ball. Wash the parts well, and poultice for two or three days with the following: Flaxseed meal mixed with a solution of two drs. sulphate of zinc to a pint of water; after which keep clean and bathe frequently with glycerine or the solution of zinc, or a solution of the chloride of lime may be used, or the bichloride of mercury may be used in inveterate cases with good results, provided it be not repeated oftener than once a week.

WATER FARCY.

Anasarca, as it is technically called, is of two kinds; one occurring in young animals, from inflammatory action; the other in old horses, from general debility. It is known by swelling of the legs, belly, sheath and other parts. In young animals there is heat, and pain on pressure on the swollen parts; in old horses there is no pain on pressure, but the marks of the finger are left behind. Treatment: Give one of the following powders night and morning in the feed: Sulphate of iron, two ozs.; nitrate of potassia, one oz.; pulverized gentian, one oz.; pulverized ginger, six drs.; anise seed, ground, half oz.; mix, and divide into eight powders: or, sulphate of copper, nitrate of potassia and pulverized gentian, of each one oz.; pulverized ginger, half oz.; anise seed, ground, five drs.; mix, and divide into eight powders. Hand-rubbing and moderate exercise every day are very important, with a pure atmosphere in your stable.

FOUNDER.

This disease occurs generally in the horse with hard, brittle or con-

tracted hoofs, in consequence of their inability to yield to the weight of the animal. In this condition they wait for the exciting or immediate cause to develop the disease. These causes are a hard drive upon a hard road, watering when warm, particularly when pump or spring water is used, standing in a draught of air, etc. Symptoms: Fore feet thrown forward, resting upon the heels, weight of the body thrown back upon the hind legs, front feet hot and tender, pulse full and quick, respiration accelerated, the animal in very severe cases seeks relief by lying down. Treatment: If the animal is in full condition, bleed freely from the feet, and give the following: Barbadoes aloes, six drs.; croton oil, six drops; pulverized ginger, one dr.; pulverized gentian, two drs.; mix with water in form of a ball; foment the feet well with hot water, and then poultice with flaxseed meal for several days; give in the water every six hours, extract of belladonna, one dr. Under this treatment the worst cases usually recover in one week's time if taken in hand early.

POMICED FEET.

This disease is known to horsemen as falling of the sole, and is the result of neglected founder. Careful shoeing, so as to protect the sole, is all that can be done in these cases.

NAVICULAR JOINT LAMENESS.

Coffin-joint lameness, as it is commonly called, is one of very common occurrence, and the symptoms often so obscure as to mislead the ordinary observer. This disease generally is preceded for months before lameness is observed by pointing, that is, by advancing one foot whenever the animal is at rest. The degrees of lameness vary considerably in different animals. In one case it is seen in the first half-mile's travel only; in others it continues for a mile or two and then disappears; in some it continues during a journey, but as the animal gets warmed up, it is not so severe as on the start. In some cases it disappears for weeks together, and then shows itself again, gradually increasing in intensity, until it becomes a permanent lameness. In the early stages of the disease there is no heat to be discovered about the foot, no swelling, no pain on pressing the heels; the animal picks up the foot nicely, but drops it tenderly, striking the toe first; the shoe, therefore, is worn considerably at the toe and very little at the heels. Should a horse be slightly lame in both feet, the

symptoms are still more obscure and difficult to diagnose. The action of the horse now becomes changed; he no longer bends his knees with the same freedom as before, he steps short, the heels scarcely touching the ground, which is a good indication of the disease.

TREATMENT.—In recent cases the application of a proper blister is usually successful, the common fly blister, thinned with spirits of turpentine, answers a very good purpose; or the following, which must be used with great caution to prevent its leaving a blemish behind: powdered cantharides, two drs.; oil of turpentine, two drs.; powdered euphorbium, one dr.; oil of origanum, one dr.; hogs' lard, two ozs. Mix all together. This should not be repeated after the blister acts. In cases of long standing, a seton put through the frog will often be of great service in restoring the animal to usefulness.

OSSIFICATION OF THE LATERAL CARTILAGES.

These cartilages are two grizzly projections or wings attached to the coffin-bone at the heels, and may readily be felt above the hoof. From contraction, corns and other causes, these elastic bodies often become changed from gristle to bone in consequence of inflammation, leaving the horse with thick heels, and a short, tender tread in traveling. The treatment in these cases is only palliative in its confirmed state; the same treatment as for navicular joint lameness is proper.

SHOULDER STRAIN.

This arises from slipping, severe blows, falling in the shafts, etc. The symptoms are all well marked. The animal, instead of raising the foot, drags the toe on the ground in walking; on making a lever of the leg, by bringing it forward, the animal manifests much pain; these usually are positive symptoms.

TREATMENT.—Bleed freely from the Plantar vein, running down upon the inside of the front legs. Foment the shoulders well with hot water if the case is a recent one. If of long standing, a seton will be more effective. The following liniment will be a useful application: Sweet oil, one pint; spirits of hartshorn, three ounces; spirits of turpentine, two ounces; mix all together; shake well before using. Or, alcohol, one pint; spirits of camphor, tincture of myrrh, castile soap, of each one ounce; mix all together. Or, oil of turpentine, one ounce; tincture of opium, one ounce; soap liniment, one ounce; tincture of capsicum, one drachm; mix all together.

CAPPED HOCK.

This is a bruise of the cap or point of the hock joint, forming a serious abscess.

TREATMENT.—Apply the blister recommended in coffin-joint lameness. Tincture of iodine or iodine ointment is sometimes useful.

BONE SPAVIN.

This is one of the most common causes of lameness in the hind legs. Spavin arises from strains, sprains, or blows upon the hock-joint, causing an inflammatory condition of the cartilaginous cushions which cover the uniting surfaces of each bone, or of the ligaments that surround the joint and bind the bones together; sometimes both are involved. This inflammatory condition of the joint may be considered the exciting cause of spavin, and, if not speedily removed, spavin soon follows; the synovial fluid, commonly called joint-oil, is soon absorbed, the cartilages of the joint are turned to bone, which unite one with the other, forming one solid mass, destroying the mobility of the parts involved, and constituting what is technically called ankylosis of the hock-joint. This union of the bones is not always general, there being in many cases but two, three, or four of the bones involved. When these changes are confined to the cartilages, there is no external enlargement; on the contrary, when the ligaments surrounding the joint are involved, we have in all cases external enlargement. When the hock receives an injury, the course of treatment usually pursued by horsemen is very pernicious. The application of a blister to an inflamed surface must do injury by increasing the inflammation they wish to abate, and in many cases actually producing a spavin where it otherwise would not exist. I do not deny that blisters are necessary and useful in such cases, if properly applied; but the idea of rubbing blisters on an inflamed surface, to reduce it, is like throwing shavings on burning coals to extinguish them. The educated physician, in applying a blister, does it so as to draw the inflammation from the part affected to a part where it will do no injury; otherwise, it had better not be applied at all. When the disease has advanced so far as to produce alteration of structure in the part, the application of blisters is proper, not for the purpose of curing the disease, but with a view of removing the lameness, by increasing the inflammation, thereby causing a more speedy union of the diseased

bones, which when perfect, causes the animal to travel sound. The seton I have found the most successful in long-standing cases. In the early stages, that is, before any alteration of structure takes place, the application of cold water to the parts will often abate the inflammation, or a blister applied above or below the hock will have the desired effect. Cooling embrocations, such as vinegar and water, are also good. When there is external enlargement, active blisters should be applied over the part. Liquid blister: Powdered cotton-seed, half oz.; powdered cantharides, one oz.; oil of turpentine, one pt.; olive oil, one pt.; mix altogether and shake well before using.

RING-BONE.

This is a disease precisely like spavin, location only giving it a different name. The same alterations in structure take place, the same terminations follow, and the same treatment is called for. Ring-bone, unlike spavin, rarely occurs without enlargement. I have never known of but one case of the kind.

SPLINT.

This is a bony deposit, situated between the cannon and splint bones, well-known to all horsemen, rarely causing lameness, except when it is situated so as to interfere with the action of the knee-joint, or at the lower extremity of the splint-bone. Few horses attain the age of eight years without having them; they disappear in time by spreading over a greater surface of bone, becoming flat upon the surface, giving rise to the opinion often indulged in by horsemen, that old horses never have splint. Splint is a disease of the same character as spavin, and requires the same treatment.

CURB.

This is an enlargement at the back part of the hock about four inches below the cap, arising from strains, bruises, breaking down of the hock, etc.

TREATMENT.—Take benoidide of mercury, three drachms; lard, two ounces; mix it well; clip the hair close, just the size of the enlargement, rub the ointment on with the finger. In three or four days the matter which oozes from the enlargement will form a thick scab; soften with fresh lard and pick it off; rub dry with the hand,

and apply as above. Five or six applications will remove any curb. For splints, apply in the same manner.

BLOOD OR BOG-SPAVIN.

This is but one disease, a bursal enlargement, or an increase in the secretion of the joint-oil, causing distention of the capsular ligament which surrounds the joint, causing puffy swellings on the front and inside of the joint, rarely causing lameness. Thoroughpin is the same disease on a more extensive scale, causing the enlargement to extend through the joint from one side to the other. The only successful treatment which I have found, with a few exceptions, is cold water compresses, placed upon the joint in such a manner as to press upon the swollen parts, and retain them there for six or eight weeks, by means of a leathern socket made to fit the joint—the compresses to be changed every day; old muslin or woolen cloth is the best material to use.

PALPITATION OF THE HEART.

This disease is known to the horsemen as the thumps, in consequence of the violent action of the heart, causing a jerking or shaking of the entire animal frame, observable at a distance of several yards. This disease is sometimes preceded by an obscure lameness, generally occurring in the off fore-leg, which, in medical language, is termed sympathetic.

TREATMENT.—The worst cases yield in two hours to the following simple treatment: Divide one drachm of digitalis into five powders, and give one every fifteen minutes, on the tongue.

INFLAMMATION OF THE BRAIN.

Mad staggers, as this disease is called, arises from various causes. Blows over the head will produce it, overfeeding, a tight collar, powerful stimulants, etc. Symptoms: the animal at first is dull, and moves with apparent reluctance, the membranes dividing the eye-lids and nose are much reddened, pulse full and quick, appetite lost, a vacant stare about the eyes, ending in delirium or madness. Every thing around the animal is destroyed or injured. He continues his ravings until exhausted.

TREATMENT.—Open the jugular vein as quickly as possible, this

should be done before the mad stage comes on, or it is too late to be of much service. Open the bowels freely, give the following: Barbadoes aloes, one oz.; croton oil, ten drops; ginger one dr.; gentian one dr.; mix with molasses or honey. Give tobacco smoke injections if convenient, or soap and water will answer the purpose, give on the tongue every two hours, ten drops tincture of aconite, until eight doses have been given, and then stop the aconite; give cold water to drink, and apply cold water bandages to the head, or bags of ice would be better; give no food for twelve hours after relief is obtained.

STOMACH STAGGERS.

This disease occurs in horses that are great feeders, in consequence the stomach becomes enormously distended, causing pressure upon the lungs and heart, interfering with the action of both, and causing a determination of blood to the head, producing stupor, with a tendency to pitch forward, resting the head against a tree or any object which may be in his way; the head often becomes bruised and cut by coming in contact with hard and rough objects, the bowels are constipated, the pulse full and slow, respiration disturbed, etc.

TREATMENT.—Give the purging ball recommended in inflammation of the brain, and bleed freely from the jugular vein, give no food for forty-eight hours. This is all the treatment the animal requires. As soon as the bowels are opened the animal is relieved. Care should be used after recovery not to allow the animal too much provender, and keep the bowels in good order, as a preventive of subsequent attacks.

POLL-EVIL.

This disease is said to arise from blows upon the head behind the ears, in going in or out of stables with low doors, pulling upon the halter, etc. Such injuries in animals whose blood is in a bad condition will cause poll-evil, but it cannot live in a healthy system. The author's experience convinces him that the disease oftener arises from hereditary causes than from any other, having met with on several occasions two or three unbroken colts, from the same mare, affected with this disease, proving beyond a doubt the ready transmission of the disease from parent to offspring.

TREATMENT.—The blood must be thoroughly purified before a cure can be effected. Give the following powder: Pulverized sulphur, one

lb.; black anatomy in powder, half lb.; mix together; dose, one tablespoonful, morning and night, in the feed. No corn or corn-meal should be given. Open the bowels with aloes or linseed oil. Lay the tumor open with a knife, and inject into the opening a solution of sulphate of zinc, two drachms to a pint of water, or the tincture of iodine is very good; sulphuric acid is used in some cases, but it is a dangerous remedy.

FISTULA OF THE WITHERS.

This disease is situated on the withers, or the raised line of the back, over the shoulders, and is precisely the same disease as poll-evil, location only giving it a different name. It is more common than poll-evil, as ten to one; arising from the same causes, and requiring the same treatment; it yields, however, more readily than the former disease.

GLANDERS.

This leathsome disease has defied medical treatment in all ages of the world. It is one of the most treacherous diseases known to man, being highly contagious, and communicated readily from horse to horse and from horse to man, by means of inoculation. Hence, the best treatment is a leaden ball through the brain. Symptoms: A discharge of matter from one or both nostrils, enlargement of one or both glands under the jaw. When one nostril only is affected, the gland on the same side is almost invariably enlarged, the membrane lining the nose is pale or leaden in color, with ulcerations upon it. The discharge usually sticks to the nostrils like glue, and is sometimes white, but oftener grayish in color. These latter symptoms appear in other diseases of a catarrhal character from an acrid discharge from the nose. Glanders fully developed is not easily confounded with other diseases, as the discharge becomes more glutinous, and adheres to the edges of the nostrils more firmly, with increased tenderness of the swellings under the jaw, which now adheres closely to the jaw-bone; the discharge is somewhat streaked with blood, and of an offensive smell; there is a slight tumefaction of the under eye-lid, a swelling or elevation of the bones of the nose or forehead, loss of appetite, debility, sometimes cough, swelling of the legs and sheath, and sometimes lameness without any apparent cause, chancres or ulcerations

within the nostrils. When these symptoms appear, the disease soon proceeds to a fatal termination.

TREATMENT.—The sulphate of soda, in ounce doses, three times a day, has been attended with partial success, and many cures are claimed through the agency of this simple remedy.

FARCY.

This disease I regard as an incipient stage of glanders, or as a type of the same fatal malady, and it is, to a certain extent, curable. There are two distinct varieties or stages of farcy—one, which is called button farcy, is altogether superficial, being confined to the lymphatic vessels of the skin, and readily yields to medical treatment; the other variety makes its appearance in the extremities, generally upon the inside of the hind legs, which become completely engorged, presenting a very uneven and lumpy appearance, excessively tender, and painful to the touch. Small abscesses are formed, which at first discharge healthy pus, but soon ulcerate and discharge a thin, sanguous matter. These abscesses first make their appearance on the inside of the hind legs, and then on the fore ones in like manner; the neck and lips come next in turn, and they may appear in all parts of the body, when glanders will begin to manifest itself.

TREATMENT.—Give one ounce of the sulphate of soda three times a day; or corrosive sublimate, in ten-grain doses, twice a day; or nux vomica, in half-drachm doses, twice a day. Sulphate of copper, in two-drachm doses, has been used with decided advantage. The tumors should be opened and caustic silver or red-hot iron applied to each.

MANGE.

This is a disease of the skin, identical with itch in the human family. The hair comes off in spots, which gradually blend together, causing scabby patches: the skin thickens and puckers along the neck.

TREATMENT.—Take the horse in the sun and scrub him thoroughly all over with castile soap and water; then wash him well from head to tail with gas-water, in which put two drachms white hellebore to the gallon. He must now be put into another stall distant from the one in which he has been standing. Thus treated it rarely requires more than one washing to effect a permanent cure. The harness

should be thoroughly scrubbed and put away for six or eight weeks. These precautions are necessary to success in this otherwise troublesome disease.

SURFEIT.

This is a scurfy eruption all over the body, arising from an impure condition of the blood, causing plethora in one animal, and general debility, etc., in another. The legs swell, the hair is rough and staring, the membrane lining in the nose presents a bluish cast.

TREATMENT.—Give the following: Barbadoes aloes, one oz.; nitrate of potassa, two drachms; gentian, one drachm; make into a ball with water; follow this with the following powder: Nitrate of potash, two ozs.; pulverized sulphur, six ozs.; black antimony, two ozs.; mix and divide into sixteen powders; give one morning and night.

HIDE-BOUND.

Any derangement of the system has a tendency to produce this condition of the skin. Medicines of an alterative character are here indicated; the most successful are: Sulphur, pulverized, eight ounces; nitrate of potassa, pulverized, three ounces; black antimony, pulverized, two ounces; sulphate of iron, four ounces; mix all together, and give one table-spoonful twice a day. Or, Barbadoes aloes, two ounces; nitre, one ounce; gentian, one ounce; mix and divide into sixteen powders, one to be given at night and one in the morning.

LOCKED-JAW.

This is one of the most troublesome and uncertain diseases with which the veterinary surgeon has to combat; it is technically called tetanus. It arises generally from nail wounds in the feet, sharp, metallic substances taken into and wounding the stomach, or stones in the stomach or intestines; bots are said occasionally to be the cause of locked-jaw, etc. The first symptoms of the disease are observed about the ninth or tenth day after the injury is done, which are a straggling or stiffness of the hind legs, to which succeeds, in a few days, the following: On elevating the head, a spasmodic motion of the membrane in the inner corner of the eye will be observed, showing little more than the white of the eye, the muscles of the jaws become rigid, the tongue is swollen and the mouth is filled with saliva, the ears are erect, the nose poked out, the nostrils expand, the

respiration becomes disturbed, and finally the jaws become firmly set, and the bowels are constipated.

TREATMENT.—That which I have found most successful, is the early administration of the following: Tincture of aconite, two drachms; tincture of belladonna, two drachms; water, one-half ounce; mix and give forty drops every four hours on the tongue. Keep a ball of aloes in the mouth for several days; there is no fear of giving too much; I have frequently given half a pound in the course of a few days, with good results. Hydrocyanic acid, twenty drops, in a little water, and put upon the tongue every four hours, is an excellent remedy. Foment the jaws with bags of hops steeped in hot water, and bathe the line of the back, from the pole to the croup, with mustard and vinegar. Be careful not to allow the animal to be unnecessarily excited by noises and bustle about him, but go about him very quietly; keep a pail of bran slop before him all the time. If the foot has been injured, poultice with flaxseed meal, and keep the wound open until healthy action has been established.

RHEUMATISM.

This is a common disease in some localities, as it is in the human family; the animal appears stiff and sore, the lameness shifting from one limb to another, the joints sometimes become swollen and painful to the touch, the animal appearing better or worse, according to the season of the year and the condition of the atmosphere.

TREATMENT.—Open the bowels with the following: Calomel, one drachm; Barbadoes aloes, four drachms; alcohol, two drachms; linseed meal, two drachms; molasses enough to make into a ball; follow this with pine tar, one-half ounce, made into a ball with flaxseed meal; give one every morning. Poultice the feet with flaxseed meal, four parts, ground mustard, one part, for several days, and bathe the affected limbs with the following liniment: Oil of turpentine, tincture of opium, soap liniment, of each one ounce; tincture of capsicum one drachm; mix all together; shake well before using.

CRAMP.

This disease baffles the judgment of the most experienced horsemen, often creating unnecessary alarm from the peculiar manner in which the animal is handled.

SYMPTOMS.—The horse appears well in body and limb, until efforts are made to move him; he then appears to have lost all power of motion in one of his legs, usually the hind ones; it is firmly planted on the ground, and the most powerful man fails to move it. On compelling the animal to move, the leg drags behind as though it were dislocated. Upon striking him with the whip he frequently will take two or three natural steps, and the leg drags as before.

TREATMENT.—Hand rubbing is very necessary, and use the following liniment upon the affected part: Alcohol, one pint; tincture of camphor, one-half pint; tincture of opium, four ounces; mix all together.

WARTS.

When the warts have necks, all that is necessary for their removal is a piece of silk tied tightly around them as closely to the roots as possible; in a few days they will slough away; or if they are larger at their base, pass a needle, armed with a double thread, through the wart as near the root as possible, and tie each way so as to cut off the circulation of the blood, and it will soon die and come away; or paint it over with the permanganate of potash once a day for a week; or use the caustic potash in the same manner; either of these remedies usually answers the purpose.

SADDLE-GALLS.

These are too well-known to horsemen to require any special remarks regarding their cause, etc.

TREATMENT.—Bathe the parts two or three times a day with equal parts of tincture of myrrh and tincture of aloes; or, collodion, one ounce; castor oil, two ounces; mixed together. Glycerine is also a very good remedy.

DISEASES OF THE EYE—AMAUROSIS, OR GUTTA SERENA,

Commonly called glass eye. In this disease the eyes have a peculiar glassy appearance, with an enlarged or expanding pupil. The eyes are clear and show no indications of disease to the ordinary observer, yet the animal is partially or wholly blind. The cause is paralysis of the optic nerve, the best means of detecting which is to expose the eye to different degrees of light, which, when disease exists, makes

no impression on the pupil whatever; while in a sound eye the pupil contracts when exposed to a strong light, and expands when removed to a weaker light, or when removed to a dark place. An animal affected with amaurosis will run against any object in his way, and present all other symptoms of a horse blind from any other cause.

TREATMENT.—Give a strong purge; follow this twice a day with half-drachm doses of nux vomica, mixed in the feed; apply a fly blister back of the eye, and give bran-mashes for a few days. No corn should be used until the sight is restored.

INFLAMMATION OF THE HAW.

As it is commonly called; also known as the Hooks. This is a swelling from inflammation of the membrane in the inner corner of the eye, called the membrana nictitans. Its office or function is to cleanse the eye of dirt or other substances getting into it.

TREATMENT.—This is simple and effective; open the bowels with the aloes ball recommended in rheumatism, and apply the following wash: tincture of opium, one ounce; rain water, one pint; mix together and bathe the eye three or four times a day. Do not be persuaded to cut out this membrane of the eye, as its removal does injury by impairing its functions.

SIMPLE OPHTHALMIA.

This disease arises from some external injury, as a blow upon the eye, or from a foreign body getting in to it, causing inflammation to ensue; the eye becomes swollen, very sensitive and watery.

TREATMENT.—Open the vein under the eye, and let it bleed until it stops of itself. Open the bowels, and use the following wash: tincture of opium, six drachms; tincture of aconite, two drachms; rain-water, one pint; mix all together, and bathe the eye three times a day; or, use belladonna, one ounce, rain-water, one pint; mix, and bathe the same.

SPECIFIC OPHTHALMIA.

This is called by horsemen, moon-blindness, from its periodical appearance; supposed by some persons to be governed by the moon. The eyes in this disease become watery, and a white film covers the entire ball of the eye. When this disease once appears, we may look

for its termination in blindness. The eyes may be cleared up a few times, but eventually the animal goes blind.

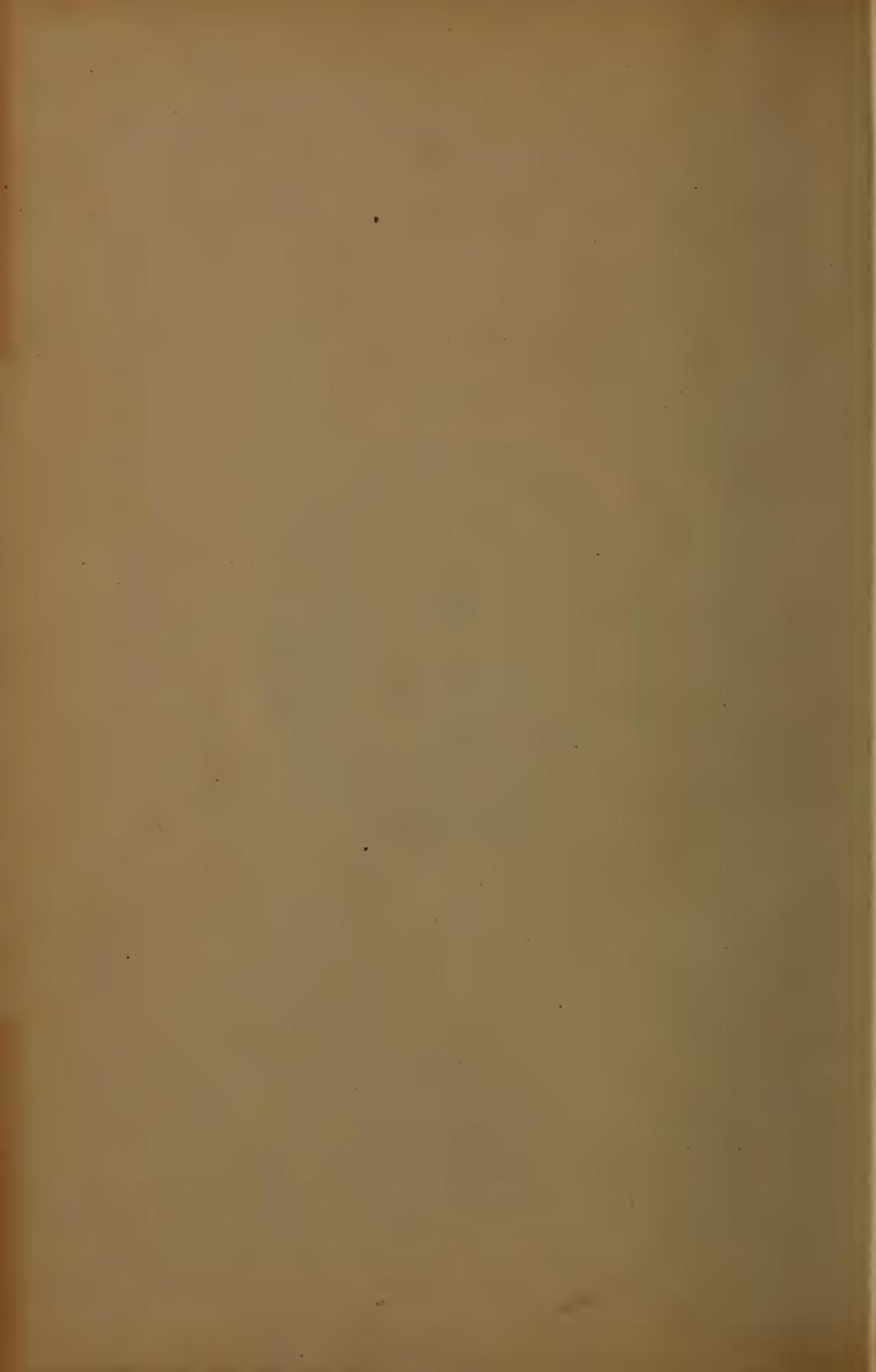
TREATMENT.—Open the bowels freely with the aloes ball, and give internally one of the following powders in the feed, night and morning; colchicum root, pulverized, one ounce; linseed meal, two ounces; mix and divide into twenty powders. Bathe the eye with the following: belladonna, one ounce; rain-water, one pint; or nitrate of silver, eight grains; distilled water, four ounces, mix; or sulphate of zinc, half drachm; diacetate of lead, one drachm; water, one and a half pints; or take a piece of sulphate of copper (blue stone), shave it thin and smooth, and pass it carefully between the eyelid and the eyeball twice a day until the eye is cleared up.

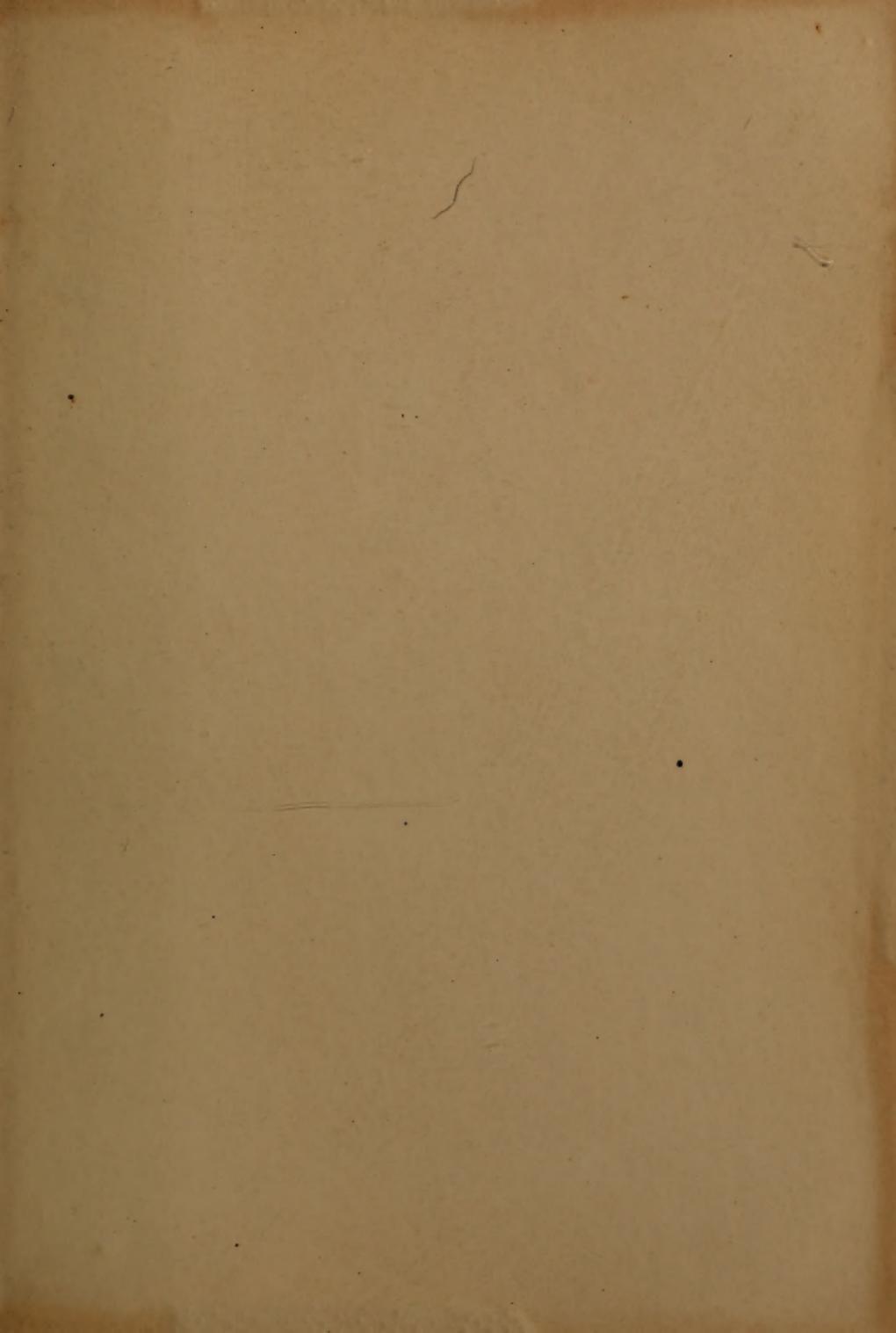
CATARACT.

This disease is usually the result of termination of specific ophthalmia, causing an opacity or breaking up of the crystalline lens, situated directly behind the pupil, presenting a white and cloudy appearance in the centre of the eye, and causing partial or total blindness. Little can be done by way of treatment in this disease as it occurs in the horse.









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